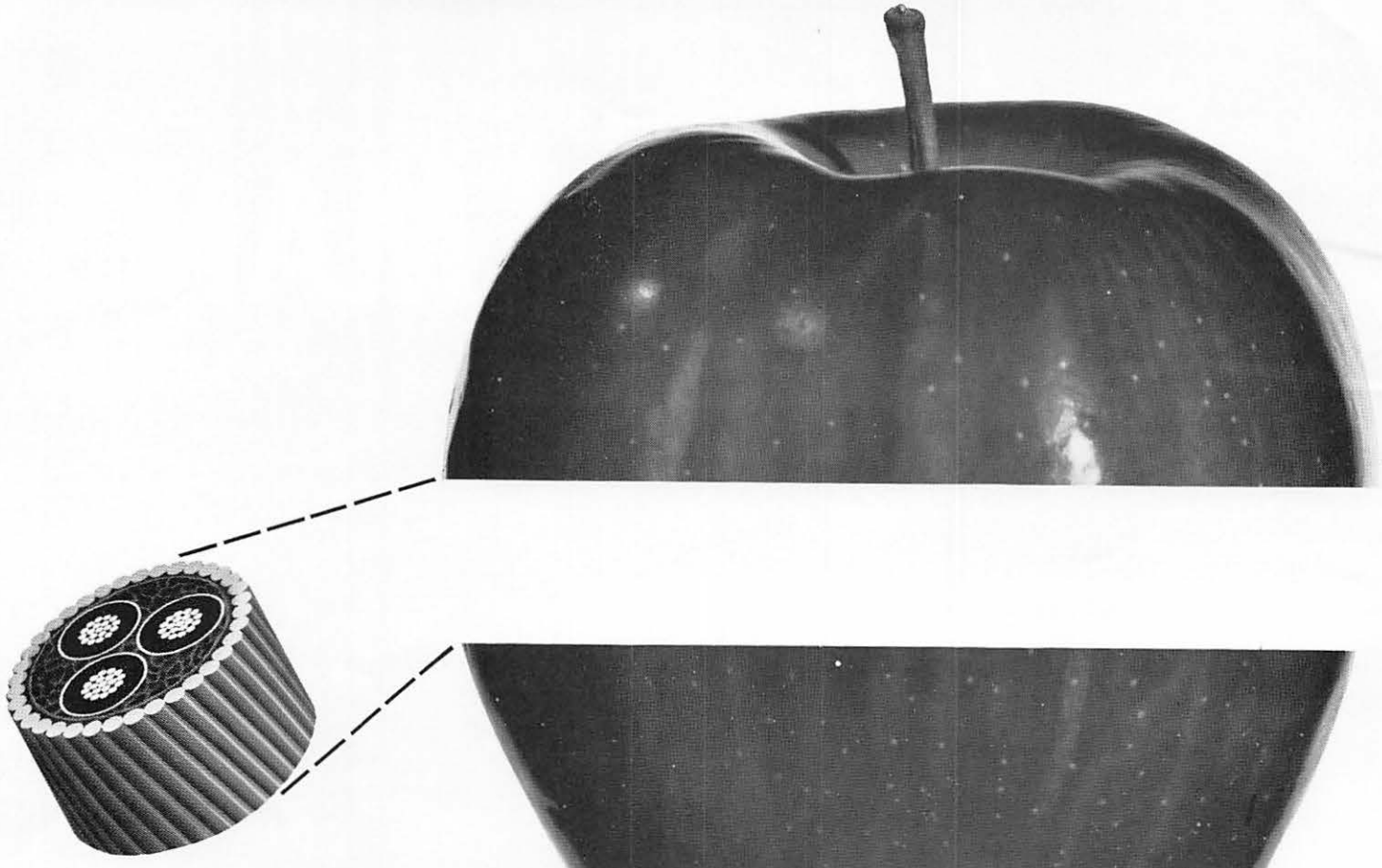
JUNE 1974

# THE SIGNALMAN'S JOURNAL

## General chairmen meet to discuss

## problems and hear experts on labor, regulatory and health issues . . . . page 8



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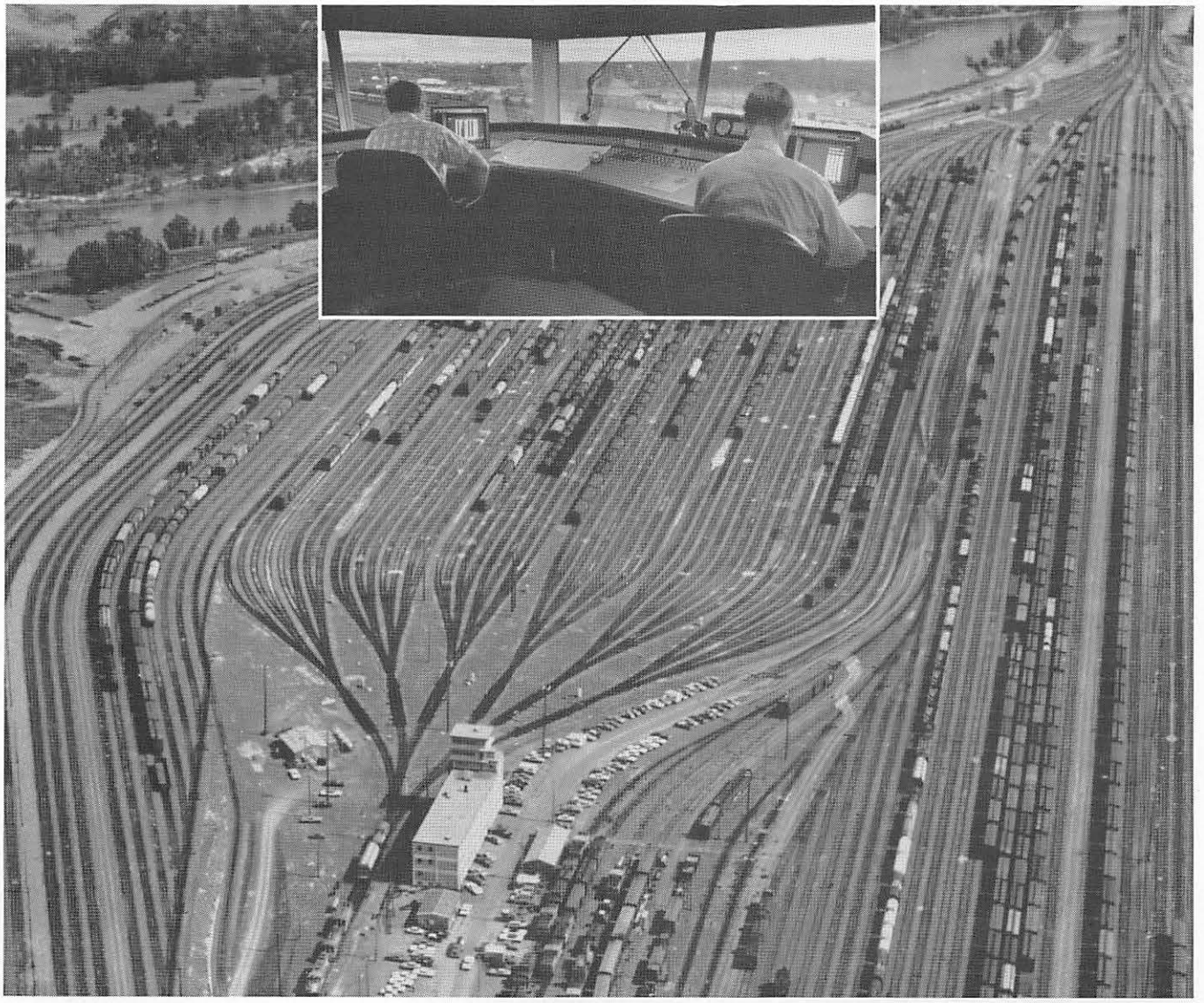

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# News About Members

## Signalmen participate in crossing meeting

Charles J. Chamberlain, president, BofRS, will be a panel speaker discussing issues relating to "Partners in Improvement" and "Establishing a Grade Crossing Safety Program" at the fifth National Conference on Rail-Highway Crossing Safety to be held Aug. 19-21, 1974 at the Air Force Academy in Colorado.

Joseph W. Walsh, BofRS vice-president, will be a panel speaker concerned with "New Approaches to Program Management."

**Partners in improvement.** An objective analysis of the roles and responsibilities of the participants in grade crossing safety improvements and a critical statement of the recurrent problems plaguing implementation programs will be discussed by Max R. Sproles, vice-president, Harland, Bartholomew & Associates International, prior to the panel discussion.

**Establishing a grade crossing safety program.** Archie Burnham, state highway traffic and safety engineer, Georgia Department of Transportation, will present an evaluation of critical elements affecting program organization; objectives, priorities, legislation, funding, data files, etc.

**New approaches to program management.** Lamar Hargrove, state railroad coordinator, Florida Department of Transportation, will present a discussion on new approaches to accelerate projects; priority systems, massed agreements, contracting design and installation, equipment standardization, materials stockpiling, and shared maintenance.

**Establishing the program mix.** Harry M. Williamson, chief engineer system, Southern Pacific, will discuss identification of the types of improvements that comprise a comprehensive grade crossing safety program; active warning devices, passive warning devices, site modifications, systems improvements, and operational warrants.

Keynote speaker will be Robert Hanrahan, Illinois congressman and member, House of Representatives Public Works Committee.

BALTIMORE & OHIO: **Orval J. Sharff,** member Monumental City Local 31, retired May 31, 1973. **Elton L. Smith** (Local 31) retired Aug. 6, 1973. **Garth F. Hammond,** member Winton Local 94, retired Sept. 28, 1973. **D. C. Arvin** (Local 31) retired May 1973 on disability.

BURLINGTON NORTHERN: **R. D. Jurgens,** member St. Paul Local 87 (former Northern Pacific), retired Aug. 31, 1973. **Leonard F. Stiegel,** (Local 87) retired April 4, 1973.

CHESAPEAKE & OHIO: **Harland G. Smith,** member Valley City Local 123 (P.M. Dist.), retired Jan. 1 1973. **Paul L. Steinman,** (Local 123) retired Aug. 3, 1973. **Brownlee Hoskins,** member of Evans Local 221 (Ashland Div.), retired Oct. 1, 1973 on disability.

ELGIN, JOLIET & EASTERN: **Shearl M. Dick,** signal maintainer, Joliet, IL, member Joliet Local 197, retired recently.

ERIE LACKAWANNA: **Peter A. Minichello,** member Deposit Local 145, retired June 30, 1973.

JERSEY CENTRAL LINES: **Joseph Sabo,** member McAdoo Local 54, retired June 30, 1973. **Homer J. Stocker** (Local 54) retired last year on disability. **Vito A. Fallacaro** (Local 54) retired March 31, 1973.

LEHIGH VALLEY: **William T. Dotter,** member Wyoming Local 59, retired March 31, 1973 on disability.

**Chicago & North Western Lodge No. 130** met in Des Plaines, IL in March to discuss, among other things, the proposed Regional Transportation Authority for 6 northeastern Illinois counties.

**John E. Hansen** was appointed BofRS director of research effective May 1, 1974 (see page 24 May issue). He was born in Chicago, IL on April 16, 1931. Following graduation from high school, he began his railway career as a signal helper on the Chicago & North Western in September 1949. During 1952 and '53, he attended the University of Iowa, majoring in electrical engineering. In 1954, he was a circuit designer on the Milwaukee Road, and a year later became a signal maintainer on the Ft. Dodge, Des Moines & Southern. He returned to the C&NW in 1956 and subsequently held the positions of signal maintainer, lead signalman

and gang foreman. At the time of his grand lodge appointment, Hansen was a relay testman.

He has been active in the BofRS for many years, serving as local chairman Lodge No. 43 since 1966, and as C&NW vice-general chairman since 1971. His brother, George Hansen, is a signal maintainer for the C&NW at Barrington, IL.

A family man, John and his wife Marillyn have been married for 25 years. At present, she is secretary to a grade school principal in Boone, IA, their home. Daughters Linda, a teacher in Esterville, IA and Sandra of Marshalltown, are married. Georgia will be a sophomore at State University of Iowa this fall and is a Big Ten cheerleader.

Active in the Masons for many years, John is a Past Master of Mt. Olive Masonic Lodge No. 79.

Hansen is an avid sports fan, an interest in anything electronic, and he is a philatelist to the knowledgeable (a stamp collector to most everyone).

**James R. Bruskay,** general chairman, Belt Railway of Chicago, Local 194, died March 9 following a long illness. He also was a signal foreman on the Belt Railway.

He is survived by his wife, Beatrice; daughters, Kathryn and Mrs. Harry Krapil; son, James; brothers, Joseph and William; sisters, Helen Jendreizak and Marie; and mother, Florence.

Interment was in Evergreen Cemetery in Evergreen, IL.

The officers and members of Local 194 and grand lodge officers and headquarters staff extend their deepest sympathy to his family.

**W. D. Best** (right) receives congratulations on becoming BofRS vice-president from president **C. J. Chamberlain.**

# Letters

**DeKalb, IL**

**To the Editor:**

Regarding the lamp brackets shown on the cover picture of the March issue, they are designed to swivel with the gate arm when they are in the reverse position than that shown in the picture. In other words, when the gate is in the clear position, the lamp units are to hang parallel with the gate arm. The reason for the brackets being mounted backwards is that I have had too much trouble with the wire breaking at the bulb socket due to the swivel every time the gate goes up and down. By turning the bracket around, the swivel effect is taken away and consequently no more broken wires at the socket. I would much rather have the brackets backwards and have the lights working than to have the brackets on the other way and not have a light.

**Vincent Unger**
**Local Chairman**
**C&NW Local No. 108**

**To the Editor:**

I did receive the December issue of the THE SIGNALMAN'S JOURNAL and thank you for sending it to me. I will look forward to seeing future issues.

Unfortunately, I must raise a point with you about the article beginning on page 297 entitled "Crossing safety gets help in Nebraska."

The article is written as if all the railroads in Nebraska participated in this project. Except for Burlington Northern and the Union Pacific, who was the sponsor, all the other roads gave to "Operation Lifesaver" was their moral support. The UP and the BN were the only two roads that provided financial support. The Union Pacific gave something over $17,000 and the Burlington Northern contributed in excess of $8,000 to this project.

**Thomas J. Lamphier**
**Executive Vice-President**
**Burlington Northern**

Join the SIGNALMAN'S POLITICAL LEAGUE. Send $2 or more to R. T. Bates, S-T, BofRS.

## National Agreement Book

We are preparing a book that will contain the basic provisions of national agreements negotiated with a majority of the U.S. railroads on which the BofRS has collective bargaining agreements. It will be a loose-leaf binder with space for the schedule agreement on an individual railroad. Certain sections must be amended to reflect if, and to what extent, a certain agreement or portion thereof has been accepted or amended on an individual railroad. Such additions or amendments will be the responsibility of the purchaser.

The book, consisting of about 350 pages, will include summary of wages and other benefits; Washington Job Protection Agreement; Eastern Carriers Union Shop Agreement of 8/29/52; vacation agreement and interpretations; paid holiday rules; claim and grievance handling rule; force reductions; 2/7/65 Agreement and official interpretations thereto; Award of Arbitration Board 298 and interpretations thereto; off-track vehicle accidents; jury duty; overtime; camp cars; apprentice programs; change of residence; earnings deduction in discipline cases; supplemental sickness benefits; union dues checkoff; AMTRAK protective conditions; and a brief summary of Travelers benefits.

Copies of the **Master National Agreement Book** are priced at $5.95 if ordered before Jan. 1, 1975; and $7.95 after that date. Orders must be postmarked Dec. 31, 1974 or earlier to receive the discount price. To order, please fill out the coupon below, and mail with check or money order payable to R. T. Bates.

Please send me _____ copies of the **Master National Agreement** book at $5.95 per copy.

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Send order with payment to **R. T. Bates, Secretary-Treasurer, Brotherhood of Railroad Signalmen, 601 W. Golf Rd., Mt. Prospect, IL 60056**

# General chairmen discuss health benefits,

Retirement legislation, federal safety programs, grade crossing protection programs both state and federal, health and insurance benefits, aid under the Federal Employers' Liability Act and reports by BofRS grand lodge officers were subjects discussed at the May 8-10 general chairmen's meeting.

**Neil P. Speirs,** labor member, Railroad Retirement Board, reviewed the background of the recent proposed changes to the Railroad Retirement Act. The basic need for the changes, he said, was that the retirement fund is running out of money—payouts exceed payment into the fund. Years ago, there were 1.5 million rail workers paying into the fund, but now the figure is about 600,000 and about 1 million people are receiving benefits.

**A. Benjamin,** director of research, RRB, answered questions from the audience. Also, he described how the benefits are to be calculated under the proposed legislation. (See TSJ May, 1974 pages 18-24.)

**FRA activities.** The Federal Railroad Administration has issued comprehensive track and equipment standards. Additional regulations in the areas of operating rules and practices, and regulating the human element in the accident equation are presently being considered. So reported **Henri F. Rush, Jr.,** deputy administrator, FRA. Turning to research programs, Rush said:

"FRA has directed its efforts toward the research necessary for the development of safety regulations and the improvement of safety technology. From a modest beginning in 1970, this year the combined total has increased to $10 million. I particularly want to acknowledge the contribution of C. J. Chamberlain (BofRS president) as a member of our research advisory committee at the Pueblo, CO Test Center. He has played an extremely helpful and constructive role on that committee and we look forward to his continuing participation as the Test Center moves to fully operational status during the coming year.

"The Center was created to meet three broad objectives: (1) To assist in advancing the technology of ground transportation, including present rail, future high speed rail and advanced systems. (2) To test the design of equipment components and entire systems, and demonstrate their reliability and serviceability. (3) To develop performance data on potential systems for intracity and intercity ground transportation," Rush said.

Concerning the hazards at rail-highway grade crossings, Rush said that FRA is continuing to work with the Federal Highway Administration "to arrive at appropriate solutions to the problems of safety at grade crossings . . . The research program in this area includes analysis of driver behavior, data collection and processing, and the development of new innovative low-cost protection equipment. We are conducting studies in the standardization of protection equipment.

"Further, we are concentrating on the establishment of a Grade

**C. J. Chamberlain,** president, BofRS (left) and **Patrick J. McCue,** executive director rail-highway systems, AAR (center) listen to **Hoy A. Richards,** research economist, Texas Transportation Institute.

## Committee working on crossing standards

A committee composed of BofRS officers and general chairmen is working on the preparation of rules standards and instructions concerned with rail-highway grade crossing warning devices. The following, appointed by C. J. Chamberlain, BofRS president, include: W. D. Best (vp BofRS), J. E. Hansen (dir res BofRS), J. W. Walsh (vp BofRS), Harvey H. Parker (C&O), Wayne Maddux (T&P signal maintainer), and James Sottile (LI).

# safety, crossing protection at May meeting

Crossing Information System based on the national inventory of grade crossings. GCIS will identify dangerous crossings enabling responsible parties to take appropriate steps to eliminate or minimize the inherent hazards," Rush said.

**Occupational safety.** Under the Occupational Safety & Health Act, employees can file complaints of unsafe working conditions, and may assist in the inspection made by OSHA personnel. OSHA and FRA have worked out a memorandum of understanding whereby joint inspections are often made with both OSHA and FRA inspectors visiting rail facilities. As for safety, FRA generally has jurisdiction, but where health hazards are concerned, OSHA generally has jurisdiction. So reported **Maywood Boggs,** special assistant, OSHA. Most violations occur in yards, shops and offices, but other locations along the right-of-way might come under OSHA-FRA jurisdiction. Concerning OSHA standards for the railroad industry, Henri Rush said that FRA is working on this and such standards should be out sometime this year. These standards will do much to clarify the jurisdiction of both federal agencies in this area.

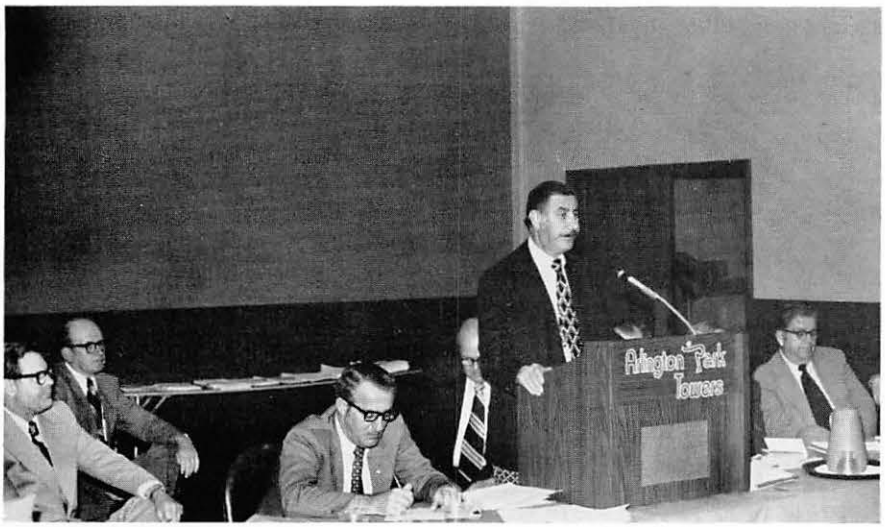
Joint FRA-OSHA inspections of alleged violations following receipt of complaints are running about two to one over inspections by each agency separately. Boggs mentioned that of 215 complaints received, FRA had made 33 inspections, OSHA had made 23 inspections, and joint FRA-OSHA inspections totaled 61.

**Travelers insurance. Patrick J. Lavery,** senior supervisor, The Travelers, reported that revisions of the National Group Insurance Plan GA-23000 are contemplated with negotiations pointing toward a March 1, 1975 effective date. Turning to what policyholders can do to help themselves, he remarked that they should always inform their nearest Travelers office of any change of status. In this respect, he suggested that furloughed and retired employees contact their nearest office to obtain information, and if eligible to enroll during June, July and August of this year for the GA-23111 policy. (Other details are found on page 24 of this issue.)

**R. C. Howard,** secretary-treasurer, LABOR newspaper, pointed out that the twice-monthly paper is now reaching over 450,000 railroad union members. In Canada, 55,000 union members receive CANADIAN RAILWAYMAN, which is part of the LABOR publishing venture. Its success and acceptance is attested to by the fact that several college and university libraries have subscribed to microfilm editions.

**Crossing protection.** Activity to improve protection for some 30,000 highway-railroad grade crossings is under way. With passage of the twin federal highway bills of 1973 —one highway aid, the other highway safety—about $250 million will be available in fiscal 1974 and 1975 for this work. The federal share of the costs is 90% and the local share is 10%.

"Improvements eligible for funding under the new legislation include: (1) Installation of standard signs and markings at all crossings;




**A. Benjamin,** research director, Railroad Retirement Board, (podium) answers questions from audience as (left to right) **J. T. Bass,** BofRS vp; **Neil Speirs,** labor member RRB; **R. T. Bates,** secretary-treasurer BofRS; **C. J. Chamberlain,** president, BofRS and **C. S. Chandler,** vp BofRS listen.

**Donald W. Bennett,** chief counsel, FRA discusses the legal view of safety and FRA's activities in the railroad safety area.

**Numberplate** banded to crossing signals is identification for crossing inventory program.

**Frank Petro,** attorney, discusses FELA, as **Eugene Rerat,** attorney, (left); **J. W. Walsh,** BofRS vp; **L. Hastings,** attorney; and **W. W. Altus,** BofRS vp, listen.

(2) Installation of new train-activated warning devices; (3) Upgrading of existing train-activated warning devices, including track circuit improvements and interconnection with highway traffic signals; (4) Crossing illumination; and (5) Crossing surface improvements," reported **Patrick J. McCue,** executive director, highway-rail programs, AAR.

Because some of the money is available for crossings off the federal-aid highway system, states are going to need advice and help in identifying these local road crossings that could be improved. In this local area, signalmen working with railroads and local officials can identify crossings that need these improvements.

"Roughly 40% of all vehicle-train accidents occur at the 20% of the crossings with train-activated warning devices. Why? Because these crossings experience a higher volume of rail and highway traffic. "The most effective way of reducing these accidents is by greater use of automatic gates. The addition of gates to flashing-light signals can be expected to reduce the probability of an accident by two-thirds or more," McCue said.

Adequate and appropriate track circuits and controls which may incorporate some form of speed measurement and motion sensing are essential to provide a reasonably uniform warning time in advance of the arrival of the train at the crossing. "Without this uniform warning time, the motorist loses trust in the warning devices. When this happens, he resorts to his own judgment to determine if a train is really coming and the value of the crossing signal system is lost," he said.

**More installations.** "The ability of the federal, state and local governments and particularly the railroad industry, labor unions, and equipment suppliers to respond to the promise of this legislation and complete the installation of new grade crossing warning systems in a timely fashion" is of concern, McCue said.

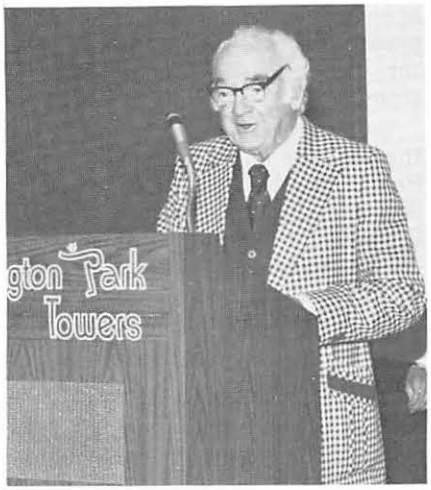
"We've been watching the current accumulation of projects for the installation of grade crossing warning devices with federal-aid funds which are now in the pipeline. These are projects for which funds have been obligated, and the work has been authorized but not yet completed. By our latest count there are over 700 projects in this backlogged status involving a total of $18 million. Well over 100 of these projects are in one state which has accelerated its grade crossing improvement program over the last two or three years. What is going to happen if and when other states accelerate their programs in a similar manner?

"When this occurs—when a large number of projects are caught in this backlogged status—funds are tied up but no safety benefit is being returned. This could result in funds being directed by the highway departments to other types of improvements. The realization of the promise of this legislation hinges on whether the warning devices can be installed in a timely manner," McCue said.

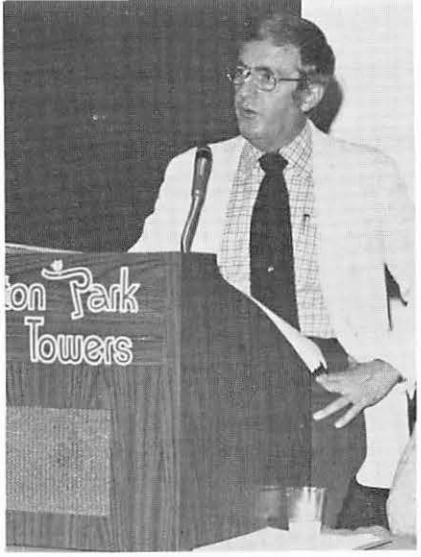
He also alerted signalmen to the fact that the Florida legislature had considered contracting out the installation work for installing warning devices at grade crossings, but action by the BofRS working with the railroads and suppliers to provide a stepped-up program of installations has probably forestalled passage of such legislation. Also under consideration is the purchasing and stockpiling of warning devices and materials by the state to prevent shortages from occurring when forces are available for installation work.

The BofRS should become a full partner with the governmental agencies, especially state and federal, as well as the railroads in promoting and working on the accelerated program of installing automatic warning devices at rail-highway grade crossings. The present backlog of 700 crossings not so equipped must be worked off because it is important to save lives. Also, the accident rate is about one accident per year at these 700 crossings.

**Need for strategy. Hoy A. Richards,** a former BofRS member and Santa Fe signalman, and now research economist, rail sytems program, Texas Transportation Institute, Texas A&M University, told his general chairmen's audience that BofRS needs to determine its strategy in this situation. Factors to be considered in addition to the public need for saving lives include: the security of jobs for signalmen, openings of new jobs, and an increased labor force both short and long term to install and maintain the warning devices. There will be a need to train new men for this installation work. Also, will the men be kept on the payroll once this



**Eugene Rerat,** attorney, tells why some lawyers are specialists in employers' liability matters.



**Mac E. Rogers,** associate administrator, Office of Safety, FRA, discusses progress in safety.

**A. E. Lyon,** president emeritus, BofRS; and **C. J. Chamberlain,** president BofRS, pose for camera.

work is completed, or will they be kept busy on other signal work? Or will they be dropped? The alternative to provide installation forces is through the use of contractors. Agreements could be made with contractors by BofRS, and this possibility should be considered. Richards emphatically stated that he was not prescribing a course of action, but urged the BofRS to study the situation and suggested it would be of benefit for all concerned if a broad plan or strategy was developed.

BofRS can be a meaningful partner in helping to improve this grade crossing safety program by: working with states to determine the crossings to be upgraded with warning devices; encourage states to participate in providing maintenance funds for warning devices (Texas, for example, pays $100 per year for maintenance for a single-track grade crossing and $150 per year for a double-track crossing); work with railroads and state legislatures to increase public responsibility for grade crossing safety; work with schools, police and railroads in making drivers aware of the hazards at grade crossings; and in general make everyone aware that BofRS is a full partner in this safety program.

**Legal view of safety.** The FRA safety committee has been very active—has 17 regulatory proposals before it—with advance notices issued on operating rules, blue flag rules, locomotive speed recorders and slip/slide indicators. "This year we expect to issue proposed rules on accident reporting, use of railroad radio, employee physical qualifications and the use of alcohol and drugs," reported **Donald W. Bennett,** chief counsel, FRA. Included in regulations under consideration for revision are the Signal RS&I. To date, FRA has issued new track and equipment safety standards.

"In the area of operating rules we are proposing the formation of an official advisory committee to assist the FRA. The advisory committee would be composed of experts from rail management, labor and the states. It would provide the FRA with an expert working group to advise the FRA. It would review the total area of railroad operating rules, identify problem areas, and suggest solutions.

"We are also making more use of an advance notice of proposed rule making. With an advance notice we do not propose the actual text of new rules for comment. Instead, we request the views and advice of the public on the general subject matter of a proposed rule. After we receive this information, we will then propose more definite and specific rules," Bennett said.

The 1970 Safety Act also provides for federal-state partnership for railroad safety. At present, progress is being made in the track safety area. "The Act provides that FRA may pay up to 50% of the cost of personnel, equipment and activities of the state. Funding has now been provided for this program," he said.

"The Act has provided standards for state participation and FRA has determined the qualifications necessary for a state to assist in this program. The FRA regulations provide for the minimum number of certified track inspectors for each state and the minimum qualifications for such inspectors. The qualifications for state track inspectors are identical to those qualifications required of federal inspectors. This will provide for uniform administration and enforcement of the track safety standards," Bennett said.

**Employers' liability.** Several attorneys spoke to the general chairmen about the Federal Employers' Liability Act and its importance to signalmen. **Eugene Rerat** (of Rerat, Crill, Foley and Boursier) explained that certain lawyers are designated to handle cases concerning FELA, because they are specialists in this type of practice and most knowledgeable about FELA. He said there is no charge for their work. Their fees are based on the awards won, usually about 25% of the money awarded.

The Federal Safety Appliance Act might well cover signalmen particularly when they are operating track motor cars. If there is a failure of safety appliances, such as brakes on a track motor car, then the railroad is 100% liable. FELA can provide protection for witnesses to tell what they know about an accident, reported **Al Rives** (of Rives, Peterson, Pettus, Conway and Burge).

Be most careful when making out accident forms report, and if possible get advice or help. Don't be pressured into filling out the accident report while incapacitated or even when recuperating. Make such reports when relaxed and the time can be taken to think about the information to be supplied. The

accident report should be a well-considered, carefully prepared statement, said **Frederick L. Nelson** (of Hildebrand, McLeod and Nelson, Inc.). Also, the accident report is the proper place to call attention to defects or causes that contribute to the accident.

**L. Hastings** (of Hastings, Elias and Goldman) said that the injured ways: (1) assist in obtaining medical attention and care; (2) protects men who cooperate or seek help from lawyers or union members. He also stressed the importance of describing to a jury the medical and economic aspects of a case. Call in the experts for help, he advised.

**Frank Petro** (of Henslee, Monek and Henslee) said that it is proper that unions are involved in FELA because of the legitimate relationship between the railroad and its employees. Also, it is legitimate for employees to have legal counseling, which can help in at least three ways: (1) assist in me obtaining medical attention and care; (2) protect the man's job; (3) obtain a settlement.

**Signalman's Journal progress.** "Major objective is to make THE SIGNALMAN's JOURNAL an effective, vital communications vehicle for the Brotherhood of Railroad Signalmen. To achieve this objective, several steps have been taken to strengthen TSJ and the continuing improvement program is progressing," said **Robert W. McKnight,** editor and manager.

Innovations include a visual redesign of the magazine, intended to make it easier to read and find items through departmentalization. Also added are educational articles, features about BofRS members and articles about signal equipment operation, maintenance.

**Safety impact.** Under FRA auspices, the first major safety legislation in 50 years has been passed. This has had a tremendous impact on rail operations, reported **Mac E. Rogers,** associate administrator, office of safety, FRA. The track and equipment standards are now in force. Also, he said that FRA does have jurisdiction over track motor car set-offs. The goal in staffing the signal and train control function of FRA is to have 40 signal and train control inspectors and 8 S&TC supervisors.

Discussing Provident's supplemental sickness benefit plan, **B. Edwin Ridge,** vice-president, Provident Life and Accident Insurance Co., said that delays can be considerably reduced if claims are filed with the correct name and correct Social Security number. Also, he answered questions from the general chairmen about details of the plan and its application.

**K. McMurray,** chairman, National Mediation Board, said that NMB appoints National Railroad Adjustment Board referees, but if a party does not want a particular referee hearing his case, then another will be assigned to the case. Concerning representation elections, he said that for unorganized workers there is a need for signatures of 35% of the workers requesting an NMB election, after which a bargaining agent could be certified. For organized workers, the requirement is for signed cards for an election from 50% of the workers plus one.

**Communicating.** "The name of the game is communications," said President **Charles J. Chamberlain,** in addressing the general chairmen. Communications at all levels between unions and railroads is good. Dialogue should be maintained especially between the union and the railroad personnel or labor relations department.

He urged general chairmen to be more responsible, and do more work at the field level in handling problems.

**R. T. Bates,** secretary-treasurer, BofRS, reported that 357 notices had been sent to men in excepted positions who hold special withdrawal cards providing them with applications for payment of half-dues. They can elect to waive the half dues, but pay five years' dues when they return to the ranks to obtain full reinstatement to BofRS. A reasonable period to act on the request is 60 days from the date the man receives the application for half-dues.

**W. W. Altus,** vice-president, serving on NRAB, said he is not satisfied with the win-loss ratio of board cases, but progress is being made to improve the ratio in BofRS' favor. He issued an up-to-date list of awards made by the NRAB.

**M. B. Frye,** vice-president, reported that work was underway to print a national agreements book that would be in loose-leaf form. (See page 7 for order information on this new publication.)

**W. D. Best,** vice-president, reported that there are now 17 full-time general chairmen representing members on their properties. Also, he added that at least two major roads and several others are either progressing toward this goal or are studying the situation very carefully.

**J. W. Walsh,** vice-president, said that lobbying will be required to obtain Congressional passage of the revised railroad pension plan, and this is an area where general chairmen can help at the grass-roots level. A renewed effort on the part of all BofRS members in informing Representatives and Senators about the pension reform and other areas of interest to labor can be most productive. Also, Walsh announced that a regional meeting of the BofRS would be held in New York City on October 5.

## NRAB committee appointed in BofRS

President C. J. Chamberlain appointed the following general chairmen and BofRS officers to an advisory committee to discuss and suggest improvements in the handling of cases before the National Railroad Adjustment Board: Robert E. Brennan (B&OCT), Harvey H. Parker (C&O), V. J. Sartini, Jr. (N&W), James Sottile (LI), B. J. Woodruff (ICG), W. W. Altus (vp BofRS), M. B. Frye (vp, BofRS), W. B. Harwell (gl rep, BofRS), and W. A. Radziewicz (gl rep, BofRS).

## Wage committee appointed in BofRS

An advisory committee to help prepare the wage and benefit package to be presented to the railroads has been appointed by C. J. Chamberlain, president. The following are appointed to this advisory committee: Bernard E. Britcher (PC), Henry S. Gerth (C&NW), George G. Gross (SCL), C. K. Kiernan (PC, former NYC lines East), W. W. Lauer (BN), Richard R. Van Vacter (AT&SF), J. T. Bass (vp BofRS), W. D. Best (vp BofRS), C. S. Chandler (vp BofRS), J. E. Hansen (dir res BofRS), and J. W. Walsh (vp BofRS).

# Determine your rights under FELA

Members who are injured on the job and the dependents of those members who have been killed or have died as the result of such injuries should by all means ascertain their rights and benefits under the Federal Employers' Liability Act before attempting any settlement with the railroad.

Below is a list of attorneys who, on the basis of information made available to us, are competent to give full information and assistance to those in need of it.

This list is compiled and maintained on the strength of information furnished us by both attorneys and members. The accuracy of the list that we will publish from time to time depends entirely on the information furnished us. Therefore, everyone concerned is urged to keep us informed regarding cases handled, nature of the case, terms of the settlement, commendations, criticisms, etc.

**This information should be forwarded to C. J. Chamberlain, president, Brotherhood of Railroad Signalmen, 601 West Golf Road, Mt. Prospect, IL 60056.**

**Aurora, CO 80010**
John J. Rossi, Morrisard & Rossi, 1901 Peoria St., Suite 202
Tel. (303) 364-9369

**Baltimore, MD 21202**
Savage, Jones, Tingle & Schwartzman, 10 Light St., 30th Floor, Maryland National Bank Bldg.
Tel. (301) 685-2713

**Bergenfield, NJ 07621**
Charles J. Tyne, 104 North Washington Ave.
Tel. (201) 384-9433

**Birmingham, AL 35203**
Rives, Peterson, Pettus, Conway & Burge, 800 First National-Southern Natural Bldg., 1900 Fifth Ave., North
Tel. (205) 328-8141

**Boston, MA 02108**
Francis H. Farrell, Suite 701, Old South Bldg.
294 Washington St.
Tel. (617) 542-3270

**Chicago, IL 60602**
Henslee, Monek and Henslee, 120 Madison Bldg.
Tel. (312) 782-5925

**Cleveland, OH 44114**
Gaines & Stern Co. L. P. A.
1700 Investment Plaza, 1801 East 9th St.
Tel. (216) 696-4666

**Denver, CO 80202**
Alex Stephen Keller, 316 Symes Bldg.
Tel. (303) 255-2603

**Denver, CO 80030**
Ratner, Mattox, Ratner, Ratner & Barnes, 3090 West 72nd Ave., Westminster
Tel. (303) 427-1414

**Fort Worth, TX 76102**
Winfred Hooper, Jr., Hooper, Steves & Kerry, 200 Fort Worth Club Bldg.
Tel. (817) 335-9377

**Houston, TX 77002**
George L. Schmidt, Schmidt, Matthews & Madigan, Houston Bar Center Bldg., 723 Main St., Suite 810
Tel. (713) 233-4466

**Indianapolis, IN 46204**
Edward J. Erpelding, 111 Monument Circle, Suite 550
Tel. (317) 638-7771

**Kansas City, MO 64105**
Norman R. Jones, Suite 1420, Commerce Tower, 911 Main St.
Tel. (816) 421-5411

**Kansas City, KS 66101**
Ratner, Mattox, Ratner, Ratner & Barnes, 804 Huron Bldg.
Tel. (913) 321-2619

**Los Angeles, CA 90013**
Clifton Hildebrand, 304 South Broadway, Suite 404
Tel. (213) 629-2214

**Los Angeles, CA 90036**
Bodle, Fogel, Julber, Reinhardt and Rothschild, 5900 Wilshire Blvd., Suite 2600
Tel. (213) 937-6250

**Miami Beach, FL 33141**
Hastings, Goldman & Forman
300 71st St., Suite 530
Tel. (305) 377-9481

**Minneapolis, MN 55402**
Rerat, Crill, Foley & Boursier, 656 IDS Center, 80 South Eighth St.
Tel. (612) 339-9231

**New York, NY 10017**
Elkind, Lampson & Sable
122 East 42nd Street
Tel. (212) 986-4921

**Oakland, CA 94612**
Frederick L. Nelson; Hildebrand, McLeod & Nelson, Inc.
1212 Broadway
Tel. (415) 451-6732

**Pittsburgh, PA 15219**
Evans, Ivory & Evans, 711 Frick Bldg.
Tel. (412) 471-3740

**Salt Lake City, UT 84101**
Wayne L. Black, Suite 400, Ten West Third South St.
Tel. (801) 328-9741

**San Antonio, TX 78205**
George L. Schmidt, 1515 NBC Bldg.
Tel. (512) 227-7565

**Seattle, WA 98104**
Piehler & Allerdice, 924 Arctic Bldg.
Tel. (206) 624-4700

**Syracuse, NY 13202**
J. Murray Dunn, 707 State Tower Bldg.
Tel. (315) 422-0303

**Tucson, AZ 85719**
John P. Somers, 2016 East Broadway
Tel. (602) 623-6111

**Vicksburg, MS 39180**
James B. Ramsey, First National Bank Bldg.
Tel. (601) 636-5561

**Wichita, KS 67201**
Ratner, Mattox, Ratner, Ratner & Barnes, 444 North Market, P.O. Box 306
Tel. (316) 262-6423

**Wichita, KS 67202**
John C. Frank, 615 Union National Bldg.
Tel. (316) 264-0346

## AF track circuits:

# How to make adjustments

*Editor's Note: This audio frequency track circuit article began in the April 1974 issue, pages 14-17.*

**In Figure 5 we see a series of safe operating zones for a number of frequencies.** In each case, the upper boundary line represents 5-ohm ballast, no shunt attenuation curve. The lower boundary line represents 200-ohm ballast with a .06-ohm shunt attenuation curve. The figure illustrates the reduction in theoretical maximum track circuit length and signal level vs frequency. Note that at frequencies above 3000 Hz the track circuit length reduction rate decreases, but the receiver signal level reduces at a greater rate indicating that the received signal level might be the practical limiting factor that determines the actual maximum track circuit length for the higher frequencies. It is only under this condition that the track circuit length may be extended by increasing the transmitted output level.

Figure 6 is an expanded version of the shaded area in Figure 4. This figure illustrates some audio frequency track circuit adjustment considerations. Since electronic track circuit receivers exhibit very little hysteresis, the track relay operated by this receiver picks up and drops with only a small change in input signal voltage. Therefore, the relay operate point can be considered to be a single input voltage trip point controlled by the receiver gain control. The widest margin operating point is one that represents a receiver voltage that is midway between the voltages designated by the upper and lower boundary curves. Since the vertical voltage axis in Figure 6 is logrithmic and not linear, the "Wide Margin Adjustment" appears to be offset toward the upper boundary curve, but the voltage values it represents are actually the mean or mid value between the upper and lower curve.

In many types of audio frequency track circuit equipment, the output level of the transmitter may vary directly with the battery supply voltage. In the receiver, this is not a problem because feedback in the receiver amplifier holds the gain constant despite battery supply voltage changes. To protect against the variation of transmitter output with battery voltage variation, a ±25% guard band is incorporated around the adjustment line. These guard band lines are carried down to the crossover point. When the guard band comes within 10% of the upper and lower boundary curve, the maximum practical track circuit length is reached. The 10% region is an additional safety margin to take care of variations in equipment and track attenuation characteristics. With this type of adjustment, when it is used on shorter and shorter track circuit lengths, its margins from the upper and lower boundary condition curves become larger. Thus, for shorter track circuit lengths the adjustment becomes

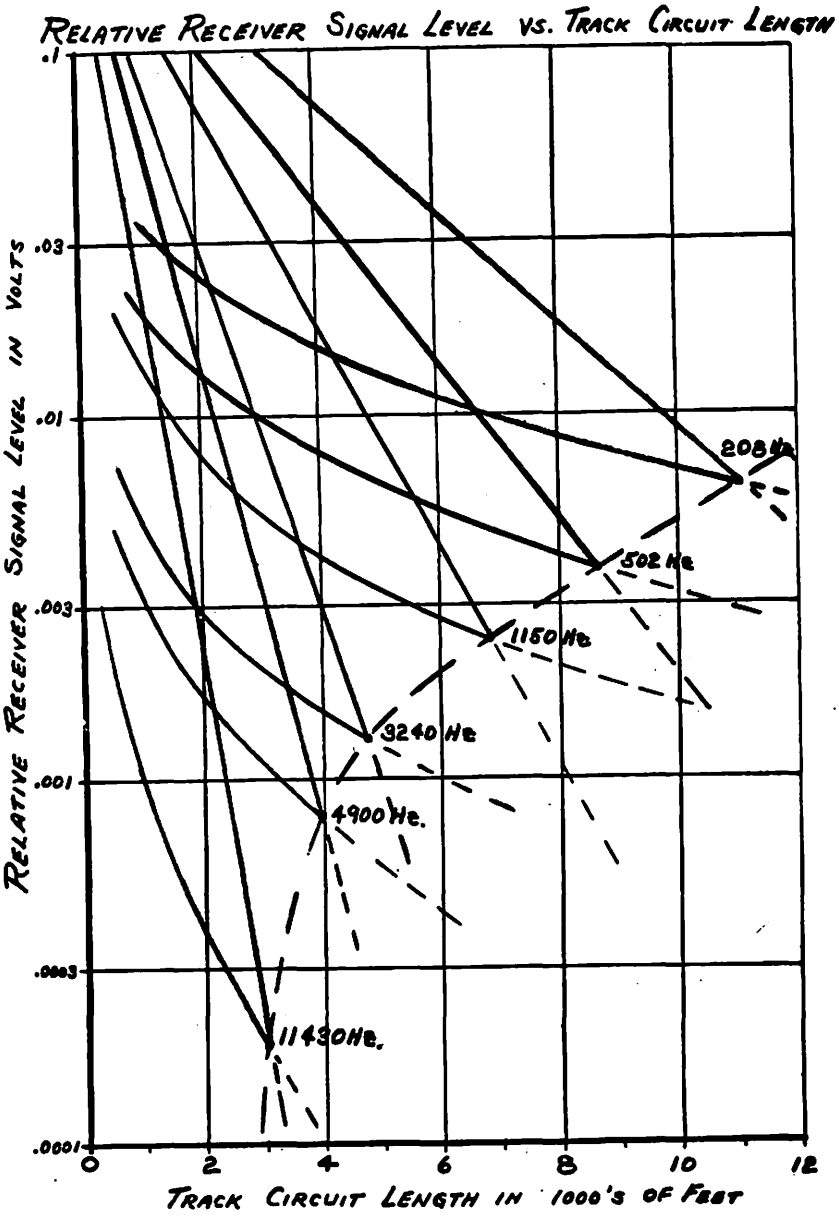



**FIGURE 5 shows a series of safe operating zones.**

less critical and is tolerant of large variations in track characteristics, uncertainty in ballast resistance determinations, and equipment and battery variations. This so called "Wide Margin Adjustment" has one disadvantage and that is a substantial increase in the preshunt distance of the track circuit as the track circuit becomes shorter for that frequency. Because insulated joints are not used with audio frequency track circuits, common voltage sensing audio frequency track circuits begin to sense the presence of a train before it arrives at the track connection point of the equipment. As a result, they shunt or drop the track relay before the train actually arrives at the track connection point. The distance ahead of the track connection point where the track relay is actually dropped by the presence of a train is called the preshunt distance. The same phenomenon occurs as a train leaves a track circuit; this shunting point distance beyond the track connection point is sometimes called the extended shunt distance.

If the long preshunt and extended shunt distance, which result from the "Wide Margin Adjustment" procedure on short track circuits, cannot be tolerated, a so called "Constant Shunting Definition Adjustment" can be used which is also shown in Figure 6. This track circuit adjustment is one where the track circuit relay pick-up voltage is maintained a constant 35% above the lower boundary condition line. The 35% consists of a 25% region to cover for transmitter battery voltage reduction and a 10% border safety margin. With this type of adjustment, the track circuit preshunt and extended shunt distance remains essentially constant for all track circuit lengths within the limit of the maximum practical length at that frequency at a given ballast resistance condition. The disadvantages of this type of adjustment are: a reduction in shunting sensitivity, a reduction in inter-rail voltage requiring high transmitter output level or higher receiver gain, and only a constant 10% safety margin in the adjustment from the lower boundary condition curve for all track circuit lengths. Note, that with both types of adjustment, only a 5500-foot maximum track circuit can be realized at 1150 Hz. This maximum track circuit length can be achieved if the transmitter output and receiver gain is sufficient to pick up the track relay at the

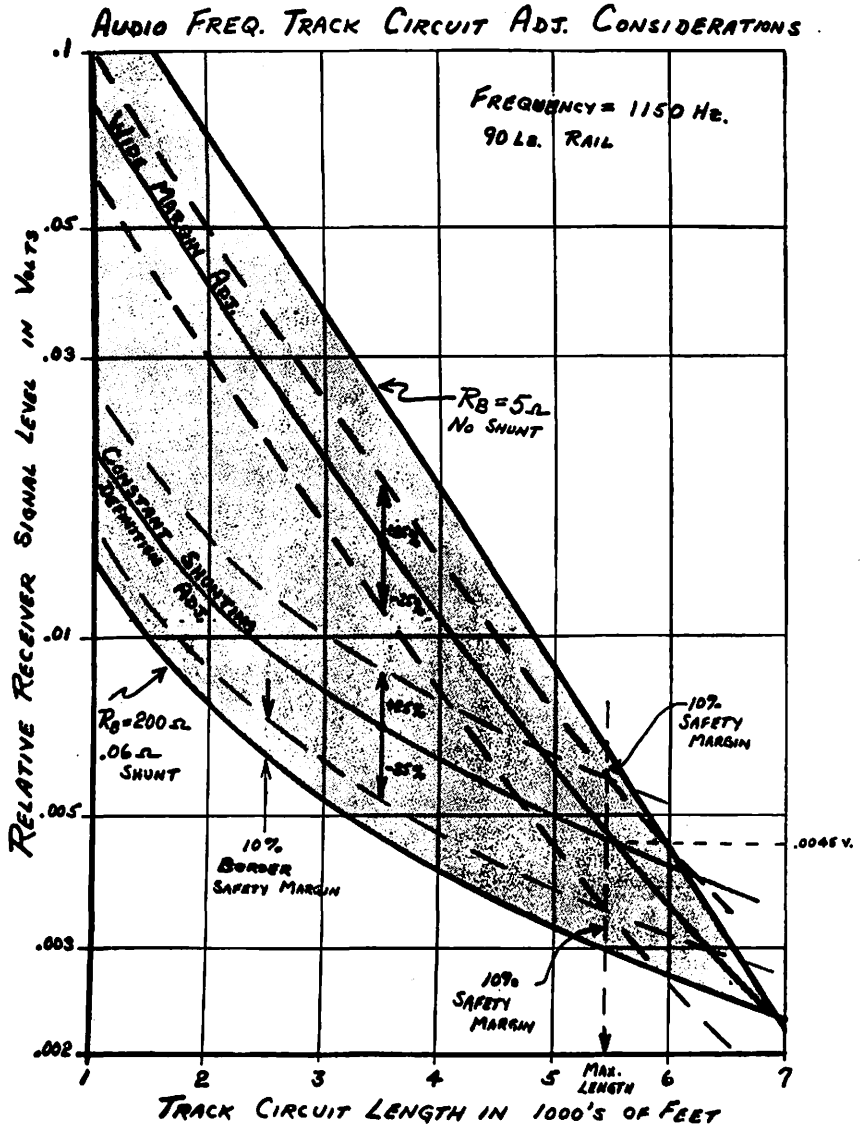



**FIGURE 6 shows curves for different ballast resistances.**

level indicated by the crossover of the two adjustment lines. The receiver signal levels shown on the vertical axis are relative to an open circuit transmitter voltage of one volt and represent about ⅛ of a watt transmitter output for the voltage values shown in Figure 6. For actual receive voltage values, the vertical voltage scale is multiplied by approximately 2 of a ½ watt-transmitter output, by 3 for a 1-watt transmitter output, and by 6 for a 5-watt transmitter output.

If we consider the actual values of received signal levels, shown on the vertical scale, the receiver sensitivity would have to be such as to pick up the track relay with .0045 volt at the receiver track terminals. If the maximum receiver sensitivity were only .01 volt, then the maximum operable track circuit length with the "Wide Margin Adjustment" would only be 4100 feet, and for the "Constant Shunting Definition Adjustment" would be 2400 feet. It is only in this instance that increasing the transmitter output level will increase the maximum operable track circuit length, but then only to the practical maximum length of 5500 feet set by the frequency of 1150 Hz. We have discussed track circuit adjustment considerations, but how do users of audio frequency track circuit equipment effect this adjustment in a simple manner.

**The concluding part of this series on audio frequency track circuits will be published in the July/August 1974 issue.**

# RS&I

## Part 236—Installation, Inspection, Maintenance, and Repair of Systems, Devices and Appliances

**Sec. 236.0 Applicability of this part.**

The following rules, standards, and instructions are hereby approved and prescribed for observance by each common carrier subject to the provisions of section 26 of Title 49 of United States Code.

## Subpart A—Rules and Instructions: All Systems

### General

**Sec. 236.1 Plans, where kept.**

Track layout plan, circuit plan, and where mechanical locking is used, locking sheet and dog chart, shall be kept at each interlocking and circuit plan shall be kept at each controlled point in traffic control systems; circuit plan for each automatic signal shall be available at the headquarters of the employee directly responsible for the maintenance of such signal; copies of all of the foregoing plans, and profile plan, drawn to scale, showing locations of signals, grades and alinement, for the sections of railroad under the jurisdiction of a divisional signal supervisory officer shall be kept at his headquarters; copies of plans pertaining to signal and interlocking facilities under the jurisdiction of general, regional or system signal officers shall be kept at their offices. All plans shall be correct and legible and available for use by the Federal Railroad Administration (FRA) representatives.

**Sec. 236.2 Grounds.**

Each circuit, the functioning of which affects the safety of train operations, shall be kept free of any ground or combination of grounds which will permit a flow of current equal to or in excess of 75 percent of the release value of any relay or other electromagnetic device in the circuit, except circuits which include any track rail and except the common return wires of single-wire, single-break, signal control circuits using a grounded common, and alternating current power distribution circuits which are grounded in the interest of safety.

**Sec. 236.3 Locking of instrument cases and interlocking machine cabinets.**

Outdoor signal and instrument cases shall be locked, except signal mechanism housings at interlockings where maintenance forces are continuously on duty. Power interlocking machine cabinets, time releases, and electric locks exposed on interlocking machines shall be locked or sealed.

**Sec. 236.4 Interference with normal functioning of device.**

The normal functioning of any device shall not be interfered with in testing or otherwise without first taking measures for insuring safety of train operation which depends on normal functioning of such device.

**Sec. 236.5 Design of control circuits on closed circuit principle.**

All control circuits the functioning of which affects safety on train operation shall be designed on the closed circuit principle, except circuits for roadway equipment of intermittent automatic trainstop system.

**Sec. 236.6 Hand-operated switch equipped with switch circuit controller.**

Hand-operated switch equipped with switch circuit controller connected to the point, or with facing-point lock and circuit controller, shall be so maintained that when point is open one-fourth inch or more on facing point switch and three-eighths inch or more on trailing-point switch, track or control circuits will be opened or shunted or both, and if equipped with facing-point lock with circuit controller, switch cannot be locked. On such hand-operated switch, switch circuit controllers, facing-point locks, switch-and-lock movements, and their connections shall be securely fastened in place, and contacts maintained with an opening of not less than one-sixteenth inch when open.

**To Be Continued**


Why for a

***Servo is the world's leading producer of electronic hot box detector systems.***

We're not experts in every phase of railroad safety — but as the industry's pioneer designer and producer of electronic hot box detection systems, we can claim a high level of successful experience in working on the problems of bearing failures, axle burn-offs and derailments associated with undetected hot boxes.

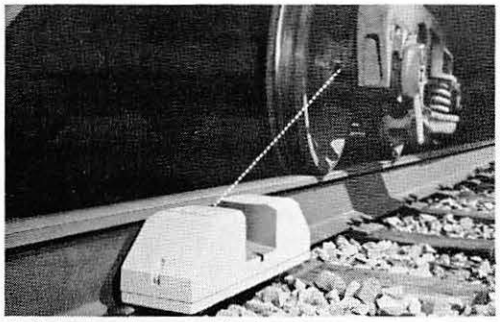
Since 1957, more than 1,800 SERVOSAFE Hot Box Detective Systems have been put into service, and have compiled an unequaled record of safety improvement, more efficient preventive maintenance procedures and cost reduction.

Hot box detectors available from Servo offer the widest flexibility in choice of system configuration, features and functional options, including: rail-mounted or ballast-mounted scanner; a complete selection of ancillary and test equipment; solid-state electronic signal processing. Several modes of data read-out are also available — automatic digital read-out at trackside or remote location; pen-paper recorder chart for visual interpretation; FM carrier data transmission over unlimited distances.

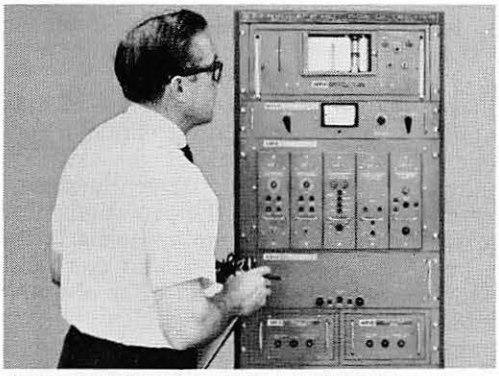
With our broad range of products and world-traveling network of field engineers, we can readily "customize" the design, manufacture, installation and operation of a SERVOSAFE System to best meet the particular requirements of your railroad.

You are invited to contact us for complete descriptive literature, or to arrange a field engineering site survey and application review — without obligation, of course.

# spend the capital SERVOSAFE® system?

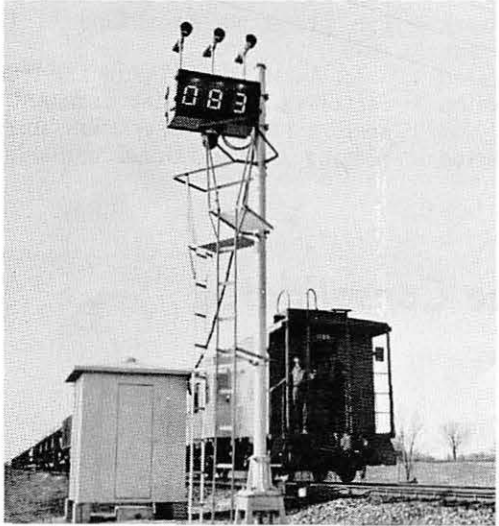


*Rail-mounted scanner "looks" at and measures the heat radiated by passing journal boxes.*



*Solid state electronic data processing equipment, with permanent record chart recorder.*

*Trackside display board gives digital read-out of hot box location.*




**BECAUSE SERVOSAFE CAN REDUCE MAINTENANCE COSTS.** Journal box and wheel set maintenance represent substantial costs each year. Part of these costs is due to normal bearing wear as cars age. Much higher costs, however, are involved when equipment is needlessly damaged by continued operation after lubrication has failed—causing major salvage jobs or replacement of wheel sets.

Where SERVOSAFE Systems are used for early detection, experience has shown that only 1 out of 10 hot boxes required a wheel set replacement. With other methods, as many as 9 out of 10 that came in for repair required new wheel sets.

**BECAUSE SERVOSAFE CAN REDUCE LABOR COSTS.** With SERVOSAFE providing an automatic and more precise method of inspecting journal boxes, railroads have been able to significantly reduce the number of personnel formerly required for manual and visual inspection of wheel journal boxes.

**BECAUSE SERVOSAFE CAN MORE THAN PAY FOR ITSELF.** Obviously, the single most important reason to make a capital investment in SERVOSAFE is to decrease the fearsome prospect of one of the greatest capital losses a railroad faces: a derailment caused by a bearing failure. The total cost of a derailment cannot be determined in advance, but it is not unrealistic to estimate that one serious derailment could cost a railroad more than 20 times the investment in a SERVOSAFE System. That's why most railroads agree that SERVOSAFE protection isn't costly—*lack of it is!*

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***Serving Safety Through Science***

MEMBER RPI

# Employees Protected in Rail

Employees now working for the seven bankrupt railroads affected by the Northeast rail bill are protected by Title V of the Act. Following any slimming of the rail lines of the seven roads—Ann Arbor, Boston & Maine, Central of New Jersey, Erie Lackawanna, Lehigh Valley, Penn Central and Reading—employees are protected financially and by collective bargaining rights. Following is the employee protection section of the 1973 Regional Rail Reorganization Act of 1973. The word "Corporation" refers to the Consolidated Rail Corporation which is the operating Carrier. *(Note: Employee protection is actually Title V in the Act, not Title VIII as mentioned in the January issue, which was its designation in the House sponsored bill.)*

TITLE V—EMPLOYEE PROTECTION

**Definitions**

Sec. 501. As used in this title unless the context otherwise requires—

(1) "acquiring railroad" means a railroad, except the Corporation, which seeks to acquire or has acquired, pursuant to the provisions of this Act, all or a part of the rail properties of one or more of the railroads in reorganization, the Corporation, or a profitable railroad;

(2) "employee of a railroad in reorganization" means a person who, on the effective date of a conveyance of rail properties of a railroad in reorganization to the Corporation or to an acquiring railroad, has an employment relationship with either said railroad in reorganization or any carrier (as defined in parts I and II of the Interstate Commerce Act) which is leased, controlled, or operated by the railroad in reorganization except a president, vice president, treasurer, secretary, comptroller, and any other person who performs functions corresponding to those performed by the foregoing officers;

(3) "protected employee" means any employee of an acquiring railroad adversely affected by a transaction and any employee of a railroad in reorganization who on the effective date of this Act have not reached age 65;

(4) "class or craft of employees" means a group of employees, recognized and treated as a unit for purposes of collective bargaining, which is represented by a labor organization that has been duly authorized or recognized pursuant to the Railway Labor Act as its representative for purposes of collective bargaining;

(5) "representative of a class or craft of employees" means a labor organization which has been duly authorized or recognized as the collective bargaining representative of a class or craft of employees pursuant to the Railway Labor Act;

**Deprived Employment**

(6) "deprived of employment" means the inability of a protected employee to obtain a position by the normal exercise of his seniority rights with the Corporation after properly electing to accept employment therewith or, the subsequent loss of a position and inability, by the normal exercise of his seniority rights under the applicable collective bargaining agreements, to obtain another position with the Corporation: *Provided, however,* That provisions in existing collective bargaining agreements of a railroad in reorganization, which do not require a protected employee, in the normal exercise of seniority rights, to make a change in residence, in order to maintain his protection, will be preserved and will also be extended and be applicable to all other protected employees of that same craft or class. It shall not, however, include any deprivation of employment by reason of death, retirement, resignation, dismissal or disciplinary suspension for cause, failure to work due to illness or disability, nor any severance of employment covered by subsections (d) and (e) of section 505 of this title;

(7) "employee adversely affected with respect to his compensation" means a protected employee who suffers a reduction in compensation;

(8) "transaction" means actions taken pursuant to the provisions of this Act or the results thereof; and

(9) "change in residence" means transfer to a work location which is located either (A) outside a radius of 30 miles of the employee's former work location and farther from his residence than was his former work location or (B) is located more than 30 normal highway route miles from his residence and also farther from his residence than was his former work location.

**Employment offers**

Sec. 502. (a) Applicable Law.—The Corporation and, where applicable, the Association shall be subject to the provisions of the Railway Labor Act and shall be considered employers for purposes of the Railroad Retirement Act, Railroad Retirement Tax Act, and the Railroad Unemployment Insurance Act. The Corporation, in addition, shall, except as otherwise specifically provided by this Act, be subject to all Federal and State laws and regulations applicable to carriers by railroad.

(b) Mandatory Offer.—The Corporation shall offer employment, to be effective as of the date of a conveyance or discontinuance of service under the provisions of this Act, to each employee of a railroad in reorganization who has not already accepted an offer of employment by the Association, where applicable, or an acquiring railroad. Such offers of employment to employees represented by labor organizations will be confined to their same craft or class. The Corporation shall apply to said employees the protective provisions of this title.

(c) Association.—After the transfer of rail properties pursuant of section 303, the Association, in employing any additional employees,

***"Corporation" is the Consolidated Rail Corporation***

# Reorganization Act of 1973

shall give priority consideration to employees of a railroad in reorganization and the provisions of this title shall apply to any such employees employed by the Association as if they were employees of the Corporation.

**Assignment of work**

Sec. 503. The Corporation shall have the right to assign, allocate, reassign, reallocate, and consolidate work formerly performed on the rail properties acquired pursuant to the provisions of this Act from a railroad in reorganization to any location, facility, or position on its system provided it does not remove said work from coverage of a collective-bargaining agreement and does not infringe upon the existing classification of work rights of any craft or class of employees at the location or facility to which said work is assigned, allocated, reassigned, reallocated, or consolidated and shall have the right to transfer to an acquiring railroad the work incident to the rail properties or facilities acquired by said acquiring railroad pursuant to this Act, subject, however, to the provisions of Section 508 of this title.

**Collective-bargaining agreements**

Sec. 504. (a) Interim Application.—Until completion of the agreements provided for under subsection (d) of this section, the Corporation shall, as though an original party thereto, assume and apply on the particular lines, properties, or facilities acquired all obligations under existing collective-bargaining agreements covering all crafts and classes employed thereon, except that the Agreement of May 1936, Washington, D.C. and provisions in other existing job stabilization agreements shall not be applicable to transactions effected pursuant to this Act with respect to which the provisions of section 505 of this title shall be superseding and controlling. During this period, employees of a railroad in reorganization who have seniority on the lines, properties, or facilities acquired by the Corporation pursuant to this Act shall have prior seniority roster rights on such acquired lines, properties, or facilities.

(b) Single Implementing Agreement.—On or before the date of the adoption of the final system plan by the Board of Directors of the Association as provided in section 207 (c) of this Act, the representatives of the various classes or crafts of the employees of a railroad in reorganization involved in a conveyance pursuant to this Act and representatives of the Corporation shall commence negotiation of a single implementing agreement for each class and craft of employees affected providing (1) the identification of the specific employees of the railroad in reorganization to whom the Corporation offers employment; (2) the procedure by which those employees of the railroad in reorganization may elect to accept employment with the Corporation; (3) the procedure for acceptance of such employees into the Corporation's employment and their assignment to positions on the Corporation's system; (4) the procedure for determining the seniority of such employees in their respective crafts or classes on the Corporation's system which shall, to the extent possible, preserve their prior seniority rights: and (5) the procedure for determining equitable adjustment in rates of comparable positions. If no agreement with respect to the matters referred to in this subsection is reached by the end of 30 days after the commencement of negotiations, the parties shall within an additional 10 days select a neutral referee and, in the event they are unable to agree upon the selection of such referee, then the National Mediation Board shall immediately appoint a referee. After a referee has been designated, a hearing on the dispute shall commence as soon as practicable. Not less than 10 days prior to the effective date of any conveyance pursuant to the provisions of this Act, the referee shall resolve and decide all matters in dispute with respect to the negotiation of said implementing agreement or agreements and shall render a decision which shall be final and binding and shall constitute the implementing agreement or agreements between the parties with respect to the transaction involved. The salary and expenses of the referee shall be paid pursuant to the provisions of the Railway Labor Act.

(c) Relationship to Other Provisions.—Notwithstanding failure for any reason to complete implementing agreements provided for in subsection (b) of this section, the Corporation may proceed with a conveyance of properties, facilities, and equipment pursuant to the provisions of this Act and affectuate said transaction; *Provided,* That all protected employees shall be entitled to all of the provisions of such agreements, as finally determined, from the time they are adversely affected as a result of any such conveyance.

**New Agreements**

(d) New Collective-Bargaining Agreements.—Not later than 60 days after the effective date of any conveyance pursuant to the provisions of this Act, the representatives of the various classes or crafts of the employees of a railroad in reorganization involved in a conveyance and representatives of the Corporation shall commence negotiations of new collective-bargaining agreements for each class and craft of employees covering the rates of pay, rules, and working conditions of employees who are employees of the Corporation, which collective-bargaining agreements shall include appropriate provisions concerning rates of pay, rules, and working conditions but shall not include any provisions for job stabilization resulting from any transaction effected pursuant to this Act which may exceed or conflict with those established or prescribed herein.

***"Corporation" is obligated under collective-bargaining agreements***

## BENEFIT YEAR

*(Continued)*

*(6) How long are benefits payable?*

*Normal* unemployment and *normal* sickness benefits are each payable for up to 26 weeks. If you exhaust normal benefits, you may be paid benefits in an extended benefit period of 13 consecutive weeks if you have 10 to 14 years of service, or of 26 consecutive weeks if you have 15 or more years of service. To be eligible for extended unemployment benefits, you must not have voluntarily retired or have left work voluntarily without good cause. To be eligible for extended sickness benefits, you must be under age 65 (normal retirement age) and you must not have voluntarily retired.

*(7) What are the qualification requirements?*

You are qualified for benefits in the benefit year which begins July 1, 1974 if you had railroad earnings of at least $1,000 in calendar year 1973, not counting more than $400 for any one month. If you were a new employee in 1973, you must also have worked for a railroad in at least 7 months of that year. Even if you earned less than $1,000 in 1973, you may still be able, under certain conditions, to receive benefits during the new benefit year if you have had at least 10 years of railroad service.

*(8) Under what conditions would I still be qualified for benefits during the 1974-75 benefit year without the required earnings in 1973?*

If you have 10 or more years of railroad service, there are some circumstances under which you may receive benefits in the benefit year 1974-75 without qualifying earnings in 1973.

1. If you received normal benefits and did not have an extended benefit period in the benefit year 1973-74, you may be able to qualify for extended benefits in the benefit year 1974-75.
2. You may qualify for benefits on the basis of your 1974 railroad earnings. Your 1974 earnings must, of course, equal at least $1,000, not counting over $400 in any one month. You must be unemployed or sick for at least 14 consecutive days in the 1974-75 benefit year.

These provisions apply alike to sickness benefits and unemployment benefits.

**For more information, you can obtain the leaflet, "Unemployment and Sickness Benefits for Railroad Workers," Form UB-9, at the nearest Board office or, by writing to Information Service, Room 543, U.S. Railroad Retirement Board, 844 North Rush Street, Chicago, Illinois 60611.**

## E & H Bonds have new upper sales limit

Series E & H United States Savings Bonds may now be purchased by individuals in one year with the following limits:

E Bonds—$7,000 issue price or $10,000 face value

H Bonds—$10,000 face value.

## Open enrollment set for June-Aug.

An open enrollment period in June, July and August has been arranged by the Cooperating Railway Labor Organization and The Travelers Insurance Company to make available coverage under Group Policy GA-23111 for those employees and their dependents (spouse and children over 14 days but under 19 years of age) not currently enrolled. During these months any retired employee or an employee who is on leave of absence, furlough or suspension with respect to his railroad employment and who while in active employment was insured under Group Policy Contract GA-23000 may enroll for the group hospital, surgical and medical plans available under Group Policy GA-23111.

The premium rates for the various types of coverage are shown on the enrollment form appearing at the end of this Article.

Furloughed employees of a hospital association railroad may enroll for dependent benefits only, unless such furloughed employees no longer have hospital association coverage.

No medical evidence of insurability will be required during the open enrollment for those not currently enrolled. In order to obtain the insurance, the only requirements are that the employee must have been covered by one of the active employee plans and submit a completed enrollment form with his check or money order for the required monthly payment before September 1, 1974.

Railroad employees described above may also insure their unmarried dependent children over 19 years of age but under 25 who are full-time students and unmarried dependent children over age 19 who are incapacitated by permanent physical or mental disability which began prior to age 19.

In addition, the widow and surviving children of an employee who was insured as an active, furloughed or retired employee are also eligible to enroll under Group Policy GA-23111.

Active employees may also enroll under Plan D of GA-23111 to provide benefits for their parents and parents-in-law who are eligible for Medicare.

For those signing up during this three-month period, the insurance coverage will become effective on the first day of the month following receipt by The Travelers of the completed form and the check for the required monthly payment.

There are four plans available; three for individuals not eligible for Medicare benefits and one for those who are eligible under Medicare.

### Plans A, B and C — For Persons Not Eligible Under Medicare

Plans A, B and C provide Hospital and Surgical Expense Benefits.

Plans B and C also provide Maternity Benefits, Medical Expense Benefits for doctor's charges for visits during hospital confinement, Radiation Therapy Benefits and Polio Expense Benefits.

### Plan D — For Persons Eligible Under Medicare

Plan D is designed to complement full Medicare benefits and provides Hospital, Medical and Major Medical Expense Benefits. The Hospital Benefit covers hospital expenses over and above those which Medicare provides during the first 90 days of confinement, but not in excess of the amounts shown in the outline below, plus hospital board and room charges for semi-private rooms up to $42 per day for an additional 90 days. The Hospital Benefit was liberalized January 1, 1974 to take care of the increase in the Deductible and Co-insurance amounts required by Medicare.

# Reorganization Act of 1973

shall give priority consideration to employees of a railroad in reorganization and the provisions of this title shall apply to any such employees employed by the Association as if they were employees of the Corporation.

**Assignment of work**

Sec. 503. The Corporation shall have the right to assign, allocate, reassign, reallocate, and consolidate work formerly performed on the rail properties acquired pursuant to the provisions of this Act from a railroad in reorganization to any location, facility, or position on its system provided it does not remove said work from coverage of a collective-bargaining agreement and does not infringe upon the existing classification of work rights of any craft or class of employees at the location or facility to which said work is assigned, allocated, reassigned, reallocated, or consolidated and shall have the right to transfer to an acquiring railroad the work incident to the rail properties or facilities acquired by said acquiring railroad pursuant to this Act, subject, however, to the provisions of Section 508 of this title.

**Collective-bargaining agreements**

Sec. 504. (a) Interim Application.—Until completion of the agreements provided for under subsection (d) of this section, the Corporation shall, as though an original party thereto, assume and apply on the particular lines, properties, or facilities acquired all obligations under existing collective-bargaining agreements covering all crafts and classes employed thereon, except that the Agreement of May 1936, Washington, D.C. and provisions in other existing job stabilization agreements shall not be applicable to transactions effected pursuant to this Act with respect to which the provisions of section 505 of this title shall be superseding and controlling. During this period, employees of a railroad in reorganization who have seniority on the lines, properties, or facilities acquired by the Corporation pursuant to this Act shall have prior seniority roster rights on such acquired lines, properties, or facilities.

(b) Single Implementing Agreement:—On or before the date of the adoption of the final system plan by the Board of Directors of the Association as provided in section 207 (c) of this Act, the representatives of the various classes or crafts of the employees of a railroad in reorganization involved in a conveyance pursuant to this Act and representatives of the Corporation shall commence negotiation of a single implementing agreement for each class and craft of employees affected providing (1) the identification of the specific employees of the railroad in reorganization to whom the Corporation offers employment; (2) the procedure by which those employees of the railroad in reorganization may elect to accept employment with the Corporation; (3) the procedure for acceptance of such employees into the Corporation's employment and their assignment to positions on the Corporation's system; (4) the procedure for determining the seniority of such employees in their respective crafts or classes on the Corporation's system which shall, to the extent possible, preserve their prior seniority rights: and (5) the procedure for determining equitable adjustment in rates of comparable positions. If no agreement with respect to the matters referred to in this subsection is reached by the end of 30 days after the commencement of negotiations, the parties shall within an additional 10 days select a neutral referee and, in the event they are unable to agree upon the selection of such referee, then the National Mediation Board shall immediately appoint a referee. After a referee has been designated, a hearing on the dispute shall commence as soon as practicable. Not less than 10 days prior to the effective date of any conveyance pursuant to the provisions of this Act, the referee shall resolve and decide all matters in dispute with respect to the negotiation of said implementing agreement or agreements and shall render a decision which shall be final and binding and shall constitute the implementing agreement or agreements between the parties with respect to the transaction involved. The salary and expenses of the referee shall be paid pursuant to the provisions of the Railway Labor Act.

(c) Relationship to Other Provisions.—Notwithstanding failure for any reason to complete implementing agreements provided for in subsection (b) of this section, the Corporation may proceed with a conveyance of properties, facilities, and equipment pursuant to the provisions of this Act and affectuate said transaction; *Provided,* That all protected employees shall be entitled to all of the provisions of such agreements, as finally determined, from the time they are adversely affected as a result of any such conveyance.

**New Agreements**

(d) New Collective-Bargaining Agreements.—Not later than 60 days after the effective date of any conveyance pursuant to the provisions of this Act, the representatives of the various classes or crafts of the employees of a railroad in reorganization involved in a conveyance and representatives of the Corporation shall commence negotiations of new collective-bargaining agreements for each class and craft of employees covering the rates of pay, rules, and working conditions of employees who are employees of the Corporation, which collective-bargaining agreements shall include appropriate provisions concerning rates of pay, rules, and working conditions but shall not include any provisions for job stabilization resulting from any transaction effected pursuant to this Act which may exceed or conflict with those established or prescribed herein.

***"Corporation" is obligated under collective-bargaining agreements***

**Employee protection**

Sec. 505. (a) Equivalent Position.—A protected employee whose employment is governed by a collective-bargaining agreement will not, except as explicitly provided in this title, during the period in which he is entitled to protection, be placed in a worse position with respect to compensation, fringe benefits, rules, working conditions, and rights and privileges pertaining thereto.

(b) Monthly Displacement Allowance.—A protected employee, who has been deprived of employment or adversely affected with respect to his compensation shall be entitled to a monthly displacement allowance computed as follows:

(1) Said allowance shall be determined by computing the total compensation received by the employee, including vacation allowances and monthly compensation guarantees, and his total time paid for during the last 12 months immediately prior to his being adversely affected in which he performed compensated service more than 50 per centum of each of such months, based upon his normal work schedule, and by dividing separately the total compensation and the total time paid for by 12, thereby producing the average monthly compensation and average monthly time paid for; and, if an employee's compensation in his current position is less in any month in which he performs work than the aforesaid average compensation, he shall be paid the difference, less any time lost on account of voluntary absences other than vacations, but said protected employee shall be compensated in addition thereto at the rate of the position filled for any time worked in excess of his average monthly time, *Provided, however,* that—

(A) in determining compensation in his current employment the protected employee shall be treated as occupying the position, producing the highest rate of pay to which his qualifications and seniority entitle him under the applicable collective bargaining agreement and which does not require a change in residence;

(B) the said monthly displacement allowance shall be reduced by the full amount of any unemployment compensation benefits received by the protected employee and shall be reduced by an amount equivalent to any earnings of said protected employee in any employment subject to the Railroad Retirement Act and 50 per centum of any earnings in any employment not subject to the Railroad Retirement Act;

(C) a protected employee's average monthly compensation shall be adjusted from time to time thereafter to reflect subsequent general wage increases;

(D) should a protected employee's service total less than 12 months in which he performs more than 50 per centum compensated service based upon his normal work schedule in each of said months, his average monthly compensation shall be determined by dividing separately the total compensation received by the employee and the total time for which he was paid by the number of months in which he performed more than 50 per centum compensated service based upon his normal work schedule; and

(E) the monthly displacement allowance provided by this section shall in no event exceed the sum of $2,500 in any month except that such amount shall be adjusted to reflect subsequent general wage increases.

(2) A protected employee's average monthly compensation under this section shall be based upon the rate of pay applicable to his employment and shall include increases in rates of pay not in fact paid but which were provided for in national railroad labor agreements generally applicable during the period involved.

***Various allowances are provided for employees governed by collective bargaining***

(3) If a protected employee who is entitled to a monthly displacement allowance served as an agent or a representative of a class or craft of employees on either a full- or part-time basis in the 12 months immediately preceding his being adversely affected, his monthly displacement allowance shall be computed by taking the average of the average monthly compensation and average monthly time paid for of the protected employees immediately above and below him on the same seniority roster or his own monthly displacement allowance, whichever is greater.

(4) An employee and his representative shall be furnished with a protected employee's average monthly compensation and average monthly time paid for, computed in accordance with the terms of this subsection, together with the data upon which such computations are based, within 30 days after the protected employee notifies the Corporation in writing that he has been deprived of employment or adversely affected with respect to his compensation.

(c) Duration of Displacement Allowance.—The monthly displacement allowance provided for in subsection (b) of this section shall continue until the attainment of age 65 by a protected employee with 5 or more years of service on the effective date of this Act and, in the case of a protected employee who has less than 5 years service on such date, shall continue for a period equal to his total prior years of service. *Provided,* That such monthly displacement allowance shall terminate upon the protected employee's death, retirement, resignation, or dismissal for cause; and shall be suspended for the period of disciplinary suspension for cause, failure to work due to illness or disability, voluntary furlough, or failure to retain or obtain a position available to him by the exercise of his seniority rights in accordance with the provision of this section.

(d) Transfer.—(1) A protected employee who has been deprived of employment may be required by the Corporation, in inverse seniority order and upon reasonable notice, to transfer to any bona fide vacancy for which he is qualified in his same class or craft of employee on any part of the Corporation's system and shall then be governed by the collective-bargaining agreement applicable on the seniority district to which transferred. If such transfer requires a change in residence, any such protected employee may choose (A) to voluntarily furlough himself at his home location and have his monthly displacement allowance suspended during the period of voluntary furlough, or (B) to be severed from

employment upon payment to him of a separation allowance computed as provided in subsections (e) and (f) of this section, which separation allowance shall be in lieu of all other benefits provided by this title.

(2) Such protected employee shall not be required to transfer to a location requiring a change in residence unless there is a bona fide need for his services at such location. Such bona fide need for services contemplates that the transfer be to a position which has not and cannot be filled by employees who are not required to make a change in residence in the seniority district involved and which, in the absence of this section, would have required the employment of a new employee.

(3) Such protected employee who, at the request of the Corporation, has once accepted and made a transfer to a location requiring a change in residence shall not be required again to so transfer for a period of 3 years.

(4) Transfers to vacancies requiring a change in residence shall be subject to the following:

(A) The vacancy shall be first offered to the junior qualified protected employee deprived of employment in the seniority district where the vacancy exists, and each such employee shall have 20 days to elect one of the options set forth in paragraph (1) of this subsection. If that employee elects not to accept the transfer, it will then be offered in inverse seniority order to the remaining qualified, protected employees deprived of employment on the seniority district, who will each have 20 days to elect one of the options set forth in paragraph (1) of this subsection.

(B) If the vacancy is not filled by the procedure in paragraph (4) (A) of this subsection, the vacancy will then be offered in the inverse order of seniority to the qualified protected employees deprived of employment on the system and each of such employees will be afforded 30 days to elect one of the options set forth in paragraph (1) of this subsection.

(C) The provisions of this paragraph shall not prevent the adoption of other procedures pursuant to an agreement made by the Corporation and representative of the class or craft of employees involved.

(e) Separation Allowance.—A protected employee who is tendered and accepts an offer by the Corporation to resign and sever his employment relationship in consideration of payment to him of a separation allowance, and any protected employee whose employment relationship is severed in accordance with subsection (d) of this section, shall be entitled to receive a lump-sum separation allowance not to exceed $20,000 in lieu of all other benefits provided by this title. Said lump-sum separation allowance, in the case of a protected employee who had not less than 3 nor more than 5 years of service as of the date of this Act, shall amount to 270 days' pay at the rate of the position last held and, in the case of a protected employee having had 5 or more years' service, shall amount to the number of days' pay indicated below at the rate of the position last held dependent upon the age of the protected employee at the time of such termination of employment:

60 or under .....360 days' pay
61 .....300 days' pay
62 .....240 days' pay
63 .....180 days' pay
64 .....120 days' pay.

(f) Termination Allowance.—The Corporation may terminate the employment of an employee of a railroad in reorganization, who has less than 3 years' service as of the effective date of this Act: *Provided, however,* That in such event the terminated employee shall be entitled to receive a lump sum separation allowance in an amount determined as follows:

2 to 3 years' service—180 days' pay at the rate of the position last held.
1 to 2 years' service—90 days' pay at the rate of the position last held.
Less than 1 years' service—5 days' pay at the rate of the position last held for each month of service.

(g) Moving Expense Benefits.—Any protected employee who is required to make a change of residence as the result of a transaction shall be entitled to the following benefits—

(1) Reimbursement for all expenses of moving his household and other personal effects, for the traveling expense of himself and members of his family, including living expenses for himself and his family, and for his own actual wage loss, not to exceed 10 working days *Provided,* That the Corporation or acquiring railroad shall, to the same extent provided above, assume said expenses for any employee furloughed within 3 years after changing his point of employment as a result of a transaction, who elects to move his place of residence back to his original point of employment. No claim for reimbursement shall be paid under the provisions of this section unless such claim is presented to the Corporation or acquiring railroad within 90 days after the date on which the expenses were incurred.

(2) (A) (i) If the protected employee owns, or is under a contract to purchase, his own home in the locality from which he is required to move and elects to sell said home, he shall be reimbursed for any loss suffered in the sale of his home for less than its fair market value. In each case the fair market value of the home in question shall be determined as of a date sufficiently prior to the date of the transaction so as to be unaffected thereby. The Corporation or an acquiring railroad shall in each instance be afforded an opportunity to purchase the home at such fair market value before it is sold by the employee to any other person.

(ii) A protected employee may elect to waive the provisions of paragraph (2) (A) (i) of this subsection and to receive, in lieu thereof, an amount equal to his closing costs which are ordinarily paid for and assumed by a seller of real estate in the jurisdiction in which the residence is located. Such costs shall include a real estate commission paid to a licensed realtor (not to exceed $3,000 or 6 per centum of sale price, whichever is less), and any prepayment penalty required by the institution holding the mortgage; such costs shall not include the payment of any "points" by the seller.

(B) If the protected employee holds an unexpired lease on a dwelling occupied by him as his

***Moving expenses are provided for in case of a residence change***

## *Reimbursement shall be made for payments to protected employees but won't exceed $250 million total.*

home, he shall be protected from all loss and cost in securing the cancellation of said lease.

(C) No claim for costs or loss shall be paid under the provisions of this paragraph unless the claim is presented to the Corporation or an acquiring railroad within 90 days after such costs or loss are incurred.

(D) Should a controversy arise with respect to the value of the home, the costs or loss sustained in its sale, the costs or loss under a contract for purchase, loss or cost in securing termination of a lease, or any other question in connection with these matters, it shall be decided through joint conference between the employee, or his representative, and the Corporation or an acquiring railroad. In the event they are unable to agree, the dispute or controversy may be referred by either party to a board of competent real estate appraisers, selected in the following manner: One to be selected by the employee or his representative and one by the Corporation or acquiring railroad and these two, if unable to agree upon a valuation within 30 days, shall endeavor by agreement within 10 days thereafter to select a third appraiser, or to agree to a method by which a third appraiser shall be selected, and, failing such agreement, either party may request the National Mediation Board to designate within 10 days a third qualified real estate appraiser whose designation will be binding upon the parties. A decision of a majority of the appraisers shall be required and said decision shall be final and conclusive. The salary and expenses of the third or neutral appraiser, including the expenses of the appraisal board, shall be borne equally by the parties to the proceedings. All other expenses shall be paid by the party incurring them, including the compensation of the appraiser selected by such party.

(h) Application of Title.—Should a railroad rearrange or adjust its forces in anticipation of a transaction with the purpose or effect of depriving a protected employee of benefits to which he otherwise would have become entitled under this title, the provisions of this title will apply to such employee.

**Contracting out**

Sec. 506. All work in connection with the operation or services provided by the Corporation on the rail lines, properties, equipment, or facilities acquired pursuant to the provisions of this Act and the maintenance, repair, rehabilitation, or modernization of such lines, properties, equipment, or facilities which has been performed by practice or agreement in accordance with provisions of the existing contracts in effect with the representatives of the employees of the classes or crafts involved shall continue to be performed by said Corporation's employees, including employees on furlough. Should the Corporation lack a sufficient number of employees, including employees on furlough, and be unable to hire additional employees, to perform the work required, it shall be permitted to subcontract that part of such work which cannot be performed by its employees, including those on furlough, except where agreement by the representatives of the employees of the classes or credits involved is required by applicable collective-bargaining agreements. The term "unable to hire additional employees" as used in this section contemplates establishment and maintenance by the Corporation of an apprenticeship, training, or recruitment program to provide an adequate number of skilled employees to perform the work.

**Arbitration**

Sec. 507. Any dispute or controversy with respect to the interpretation, application, or enforcement of the provisions of this title, except section 504 (d) and those disputes or controversies provided for in subsection (g) (2) (D) of section 505 and subsection (b) of section 504 which have not been resolved within 90 days, may be submitted by either party to an Adjustment Board for a final and binding decision thereon as provided in section 3 Second, of the Railway Labor Act, in which event the burden of proof on all issues so presented shall be upon the Corporation or, where applicable, the Association.

**Acquiring Railroads**

Sec. 508. An acquiring railroad shall offer such employment and afford such employment protection to employees of a railroad from which it acquires properties or facilities pursuant to this Act, and shall further protect its own employees who are adversely affected by such acquisition, as shall be agreed upon between the said acquiring railroad and the representatives of such employees prior to said acquisition: *Provided, however,* That the protection and benefits provided for protected employees in such agreements shall be the same as those specified in section 505 of this title: *And provided further, however,* That unless and until such agreements are reached, the acquiring railroad shall not enter into purchase agreements pursuant to section 303 of this Act.

**Payments of benefits**

Sec. 509. The Corporation, the Association (where applicable), and acquiring railroads, as the case may be, shall be responsible for the actual payment of all allowances, expenses, and costs provided protected employees pursuant to the provisions of this title. The Corporation, the Association (where applicable), and acquiring railroads shall then be reimbursed for such actual amounts paid protected employees, not to exceed the aggregate sum of $250,000,000, pursuant to the provisions of this title by the Railroad Retirement Board upon certification to said Board by the Corporation, the Association (where applicable), and acquiring railroads of the amounts paid such employees. Such reimbursement shall be made from a separate account maintained in the Treasury of the United States to be known as the Regional Rail Transportation Protective Account. There is hereby authorized to be appropriated to such protective account annually such sums as may be required to meet the obligations payable hereunder, not to exceed in the aggregate, however, the sum of $250,000,000. There is further authorized to be appropriated to the Railroad Retirement Board annually such sums as may be necessary to provide for additional administrative expenses to be incurred by the Board in the performance of its functions under this section.

# Personal Aids and News

## New benefit year begins July 1, says R. T. Bates

July 1 is the start of the 1974-75 benefit year under the Railroad Unemployment Insurance Act. This federal law provides cash benefits for qualified railroad employees who become unemployed, but are otherwise able to work and available for work, and for qualified employees who are unable to work because of sickness or injury.

The Act is administered by the U.S. Railroad Retirement Board. The following questions are among those most frequently asked of the Board.

*(1) How or where do I apply for railroad unemployment insurance benefits?*

If you become unemployed, you should register for benefits with an unemployment claims agent during the first week you are unemployed. A delay in registration may cause you to lose benefits. Since an unemployment claims agent is usually a railroad employee, your railroad foreman or supervisor can generally direct you to one at or near the location of your railroad job. After the unemployment claims agent takes your application, he will set the date for your next registration. Generally, you will be required to register once a week. The claims agent will forward your claim to the Board at the end of the 14-day registration period.

When you apply for unemployment benefits, you also apply for employment service; the Board will refer you to any suitable employment which is available.

*(2) How do I go about applying for sickness benefits?*

An application for sickness benefits (Forms SI-1a & b) can be obtained from a railroad employer, a railroad labor organization, or any Board office. An application (which includes a doctor's statement of sickness) is required at the beginning of each spell of sickness. The Board suggests that you obtain an application to keep on hand for use in claiming sickness benefits. Your family should know where the form is kept, and how to use it on your behalf, if necessary. Also, it is a good idea for you to keep your latest Form BA-6, Certificate of Service Months and Compensation, with the application. Your BA-6 form shows your social security number and includes instructions on how to claim benefits.

If you become unable to work because you are sick or injured, complete the application, have your doctor complete his part of the form, and mail it directly to U.S. Railroad Retirement Board headquarters in Chicago. Enclose the right-hand portion of your BA-6 form, but do not delay sending your application if you cannot locate your BA-6 form.

*(3) What is the time limit on filing a sickness application?*

An application should be mailed by the seventh day of the illness for which you want to claim benefits. If you are too sick to complete the application, have someone else do this for you. If the application is not filed on time, there may be a delay in the payment of benefits to you, or you may lose benefits if you cannot give an acceptable explanation for the delay in filing the application forms.

*(4) How are these benefits computed?*

Benefits are paid at an employee's daily benefit rate for each day of unemployment or sickness over 4 in a 14-day registration period, EXCEPT that for the *first* sickness benefit claim in a benefit year, benefits are paid for each day of sickness over 7. Most claimants receive the present maximum daily benefit rate of $12.70 so that their benefits can amount to $127 biweekly.

*(5) If benefits are paid on the basis of individual days, what constitutes a day of unemployment or a day of sickness under the law?*

If you are a qualified employee (see question "7"), unemployment benefits are paid for days on which you are able to work and available for work, and for which you receive no wages, salary, pay for time lost, vacation pay, holiday pay, or other remuneration.

Sickness benefits are paid for days on which you are unable to work because of sickness or injury. (For a female employee, this includes days on which she is unable to work because of pregnancy, miscarriage or childbirth.) You are not eligible for sickness benefits if you receive wages, vacation pay, pay while sick, or other pay for time lost. However, payments under a negotiated supplemental sickness benefit plan, or your own health or accident insurance policy, or from an employer relief department, or a group insurance policy, will not prevent the payment of sickness benefits.

*(Please turn page)*

**SIGNAL INSPECTORS**

Wanted for work in midwest locations. Five to seven years of field experience in signal construction and/or maintenance work on Class I railroad. Knowledge of ctc and remotely controlled interlockings essential. Associate's degree in electronics or related field and Second Class FCC license desirable. Excellent promotional opportunities. Send resume and salary requirements to Box 6741, The Signalman's Journal, 601 West Golf Rd., Mt. Prospect, IL 60056.

## BENEFIT YEAR

*(Continued)*

*(6) How long are benefits payable?*

*Normal* unemployment and *normal* sickness benefits are each payable for up to 26 weeks. If you exhaust normal benefits, you may be paid benefits in an extended benefit period of 13 consecutive weeks if you have 10 to 14 years of service, or of 26 consecutive weeks if you have 15 or more years of service. To be eligible for extended unemployment benefits, you must not have voluntarily retired or have left work voluntarily without good cause. To be eligible for extended sickness benefits, you must be under age 65 (normal retirement age) and you must not have voluntarily retired.

*(7) What are the qualification requirements?*

You are qualified for benefits in the benefit year which begins July 1, 1974 if you had railroad earnings of at least $1,000 in calendar year 1973, not counting more than $400 for any one month. If you were a new employee in 1973, you must also have worked for a railroad in at least 7 months of that year. Even if you earned less than $1,000 in 1973, you may still be able, under certain conditions, to receive benefits during the new benefit year if you have had at least 10 years of railroad service.

*(8) Under what conditions would I still be qualified for benefits during the 1974-75 benefit year without the required earnings in 1973?*

If you have 10 or more years of railroad service, there are some circumstances under which you may receive benefits in the benefit year 1974-75 without qualifying earnings in 1973.

1. If you received normal benefits and did not have an extended benefit period in the benefit year 1973-74, you may be able to qualify for extended benefits in the benefit year 1974-75.
2. You may qualify for benefits on the basis of your 1974 railroad earnings. Your 1974 earnings must, of course, equal at least $1,000, not counting over $400 in any one month. You must be unemployed or sick for at least 14 consecutive days in the 1974-75 benefit year.

These provisions apply alike to sickness benefits and unemployment benefits.

**For more information, you can obtain the leaflet, "Unemployment and Sickness Benefits for Railroad Workers," Form UB-9, at the nearest Board office or, by writing to Information Service, Room 543, U.S. Railroad Retirement Board, 844 North Rush Street, Chicago, Illinois 60611.**

## E & H Bonds have new upper sales limit

Series E & H United States Savings Bonds may now be purchased by individuals in one year with the following limits:

E Bonds—$7,000 issue price or $10,000 face value

H Bonds—$10,000 face value.

## Open enrollment set for June-Aug.

An open enrollment period in June, July and August has been arranged by the Cooperating Railway Labor Organization and The Travelers Insurance Company to make available coverage under Group Policy GA-23111 for those employees and their dependents (spouse and children over 14 days but under 19 years of age) not currently enrolled. During these months any retired employee or an employee who is on leave of absence, furlough or suspension with respect to his railroad employment and who while in active employment was insured under Group Policy Contract GA-23000 may enroll for the group hospital, surgical and medical plans available under Group Policy GA-23111.

The premium rates for the various types of coverage are shown on the enrollment form appearing at the end of this Article.

Furloughed employees of a hospital association railroad may enroll for dependent benefits only, unless such furloughed employees no longer have hospital association coverage.

No medical evidence of insurability will be required during the open enrollment for those not currently enrolled. In order to obtain the insurance, the only requirements are that the employee must have been covered by one of the active employee plans and submit a completed enrollment form with his check or money order for the required monthly payment before September 1, 1974.

Railroad employees described above may also insure their unmarried dependent children over 19 years of age but under 25 who are full-time students and unmarried dependent children over age 19 who are incapacitated by permanent physical or mental disability which began prior to age 19.

In addition, the widow and surviving children of an employee who was insured as an active, furloughed or retired employee are also eligible to enroll under Group Policy GA-23111.

Active employees may also enroll under Plan D of GA-23111 to provide benefits for their parents and parents-in-law who are eligible for Medicare.

For those signing up during this three-month period, the insurance coverage will become effective on the first day of the month following receipt by The Travelers of the completed form and the check for the required monthly payment.

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### Plans A, B and C — For Persons Not Eligible Under Medicare

Plans A, B and C provide Hospital and Surgical Expense Benefits.

Plans B and C also provide Maternity Benefits, Medical Expense Benefits for doctor's charges for visits during hospital confinement, Radiation Therapy Benefits and Polio Expense Benefits.

### Plan D — For Persons Eligible Under Medicare

Plan D is designed to complement full Medicare benefits and provides Hospital, Medical and Major Medical Expense Benefits. The Hospital Benefit covers hospital expenses over and above those which Medicare provides during the first 90 days of confinement, but not in excess of the amounts shown in the outline below, plus hospital board and room charges for semi-private rooms up to $42 per day for an additional 90 days. The Hospital Benefit was liberalized January 1, 1974 to take care of the increase in the Deductible and Co-insurance amounts required by Medicare.

| | PLAN A | PLAN B | PLAN C |
|---|---|---|---|
| **HOSPITAL BENEFITS** | | | |
| Room and Board—Daily Benefit up to | $ 16 | $ 20 | $ 40 |
| Room and Board — Maximum per confinement* | 1,120 | 1,400 | 2,800 |
| Hospital Extras and Emergency Out-patient, up to* (Including Ambulance service up to $25) | 120 | 400 | 800 |
| **SURGICAL BENEFITS** | | | |
| Per Schedule up to | 240 | 350 | 420 |
| Obstetrics | (Not Covered) | 87.50 | 105 |
| **DOCTOR'S VISITS IN-HOSPITAL** | | | |
| Per day of hospital confinement | (Not | 5 | 5 |
| Maximum per confinement* | Covered | 350 | 350 |
| **RADIATION THERAPY BENEFITS** | | | |
| Per Schedule — Maximum per Calendar Year; or for any one injury or sickness | (Not Covered) | 200 | 300 |
| **POLIO BENEFITS** | (Not Covered) | 5,000 | 5,000 |

*Successive confinements due to the same or related causes are considered as one confinement unless there is a complete recovery from the injury or sickness causing the earlier confinement.

The Medical Expense Benefit pays the first $60 of the total of charges in a calendar year for surgery, doctor's in-hospital visits, X-ray and laboratory examinations, and emergency out-patient hospital expense incurred within 72 hours of an accident or surgery.

The Major Medical Expense Benefit is a very valuable part of this plan. After the insured person has paid the first $50 of expense incurred in a calendar year, the plan picks up 80 percent of reasonable "covered expenses" in excess of that $50 plus the benefits already paid under Medicare and the basic Hospital and Medical Expense benefits. The maximum payable as to each insured person is $50,000.

Here is an outline of Plan D:

**HOSPITAL BENEFITS**

$84 for the first 60 days (Medicare Deductible)
$21 per day from 61st through 90th day (Medicare Co-insurance)
up to $42 per day from 91st through 180th day.

**MEDICAL EXPENSE BENEFITS**

First $60 of the total of charges in a calendar year for
Surgery
Doctor's In-Hospital visits
X-Ray and Laboratory Examinations
Emergency Out-Patient Hospital Expense within 72 hours of an accident or surgery

**MAJOR MEDICAL EXPENSE BENEFITS**

$50,000 Maximum, with $1,000 automatic restoration each January 1.

## Emblems Available

Cloth emblems for all major railroads are now available. Emblems are available in 2", 3" or 4" sizes.

A hickory stripe engineer cap with emblem attached plus an extra emblem (not attached) is priced at $2.25. Please be sure to include name, address and cap size with your order.

For $1.25 a list of emblems available plus two sample emblems may be obtained.

**Write to Bosch Embroidery Inc., P.O. Box 8565, 300 West 79th Terrace, Kansas City, MO 64114.**

Since Medicare benefits are taken into consideration in determining what will be paid under Major Medical, it is very important that all eligible persons be enrolled under Medicare in order to have the maximum possible insurance protection. It should be noted that the Medicare Amendments effective July 1, 1973 extend Part A and Part B Medicare coverage to certain Disabled persons regardless of age and Part A coverage to persons Age 65 and over who previously were not qualified by virtue of personal entitlement or as the dependent of a covered person. Any person eligible under Medicare who qualifies for enrollment under GA-23111 must enroll under Plan D if coverage complementary to Medicare is desired. If an employee with two or more dependents, one of whom is eligible under Medicare, wishes to provide coverage under GA-23111 for all of his dependents, he must enroll for Plan D coverage for the person eligible under Medicare in addition to enrolling for coverage under Plan A, B or C for the remaining dependent(s) in order to obtain coverage for all dependents.

A Medicare Authorization form which, when completed by eligible persons and sent to The Travelers, will allow prompt handling of claims involving Medicare benefits.

An active employee insured under Group Policy Contract GA-23000 or Group Policy GA-107300 may enroll under Plan D to provide benefits for his parents who are eligible under Medicare.

In order to enroll, simply fill out and sign the enrollment form. A widow should show "Mrs." with the given name of her deceased husband.

Mail the completed enrollment form with your check or money order to The Travelers Insurance Company, P.O. Box 3002, Group Department, Railroad Division, Hartford, Connecticut 06101. Persons eligible for Medicare should also send a signed copy of the Medicare Authorization form to The Travelers with their enrollment form.

Enrollment forms are available at The Travelers Insurance Co. offices.

## Changes made in Travelers' insurance

At the February 1974 meetings with the Railway Labor Organiza-

*(Please turn page)*

## INSURANCE

*(Continued)*

tions, who are the Policyholder under Group Policy GA-23111, a detailed study of benefits and claim payments under the various Plans was made. This study indicated that the premiums currently being charged under Plan A and Plan B were sufficient to continue the present level of benefits with no change in the Required Monthly Payments.

With respect to Plan C, however, the study showed that an increase in the Required Monthly Payments will be necessary to support anticipated benefit payments. Effective June 1, 1974, therefore, the Required Monthly Payment for both Employees and Dependents will be increased from the present level of $27.00 monthly to $29.50 monthly.

Under Plan D, which is available only to persons eligible under Medicare, there have been substantial improvements in the Hospital Benefits, particularly as to the amount Employees are required to pay because of increases in the In-patient Hospital Deductible under Part A of Medicare. This Deductible, which was originally $40.00 per period of confinement, has been increased six times by the Government, the latest increase raising the deductible amount from $72.00 to $84.00 as of January 1, 1974. The constantly increasing cost to persons covered by Medicare due to increases in the Deductible and Co-insurance amounts in each of the past several years has been absorbed under your Plan each year with only one previous increase in the Required Monthly Payment. After careful consideration, the Railway Labor Organizations, who are the policyholders under Group Policy GA-23111, and The Travelers have agreed once again to improve the benefits to meet this latest increase in these costs. The improved benefit described above is applicable to expenses incurred during a period of hospital confinement which commences on or after January 1, 1974.

In order to support the Plan on the improved basis, it is necessary that the Required Monthly Payment as to Employees and Dependents be increased from $7.50 to $9.85 and from $8.50 to $10.00 as to each Parent eligible under Medicare.

The new Required Monthly Payment rates are outlined below and will be reflected in the May statements sent to insured persons by The Travelers. Payments made on the basis of these statements will provide coverage beginning with the month of June 1974.

# Shop carefully for land values

### By Sidney Margolius

Promoters of vacation homes and land developments are revising their sales tactics to soothe fears of potential buyers that they won't be able to get or afford gas to travel to such sites. The voices on the phones this spring are telling about developments that are "a short ride away" or can be reached by bus and train.

A big Western promotion, Lake Havasu City, Arizona, the one with the restored London Bridge over an artificial lake, has its own airline to make sure you can get there, at least for the sales pitch. An Eastern developer provides free gas to get to his site.

Obviously, the developers are worried. Reports have been published indicating that sales have slowed down because potential buyers are concerned about gas to get to vacation homes.

If you foresee no personal travel problems and do want a vacation site, it's become more urgent than ever to compare values. Often lots near a development may sell for less than at the site itself. Sometimes recent buyers may want to re-sell even below current asking prices of developers, and especially now because of gasoline fears.

The Federal Land Law, which became effective in 1969, has eliminated some of the worst deceptions. But the law is useful only if would-be buyers use its provisions. The law requires sellers offering 50 lots or more to register with the government and file a property report. Developers are required to give you a copy before you sign a contract. It's vital that you study it. The report provides facts on availability of water, suitability of the soil for building and for septic tanks, number of homes already built, and distance to town.

You can also check the reputation of a developer through your state attorney general, Better Business Bureau, and Office of Interstate Land Sales Registration, Department of Housing and Urban Development, Washington, D.C. 20410.

One of the most widespread of the recent promotion problems involved the GAC Corp., a holding company for the Gulf American Corp.'s developments. These include Rio Rico in Arizona, and, in Florida, Cape Coral, Golden Gate, Poinciana, Remuda Ranch Grants and River Ranch Acres and Shores.

The Federal Trade Commission now is requiring GAC to make refunds of payments in excess of 30 installments to buyers who defaulted on their contracts since July 1, 1968. The company also has agreed with the Department of Housing and Urban Development to give

GA-23111

| PERSON(S) TO BE INSURED | REQUIRED MONTHLY PAYMENT | | | |
|---|---|---|---|---|
| | Persons Not Eligible Under Medicare | | | PLAN D Each Person Eligible Under Medicare |
| | PLAN A | PLAN B | PLAN C | |
| Employee only | $ 6.00 | $15.50 | $29.50 | $ 9.85 |
| Dependents only or Widow and/or Children | $ 7.00 | $15.50 | $29.50 | $ 9.85 |
| Employee and Dependents | $13.00 | $31.00 | $59.00 | |
| Each Parent — Eligible under Medicare | | | | $10.00 |
| Student Child (age 19 to age 25) | | | $ 3.00 | |
| Incapacitated Child (age 19 and over) | | | $ 5.00 | $ 9.85 |

prospective buyers full information on finances and development plans. Ironically, my own files show that complaints against Gulf American selling methods were made as far back as 1967.

Several provisions of the consent order are designed to remedy financial harm done to many purchasers of lots in Golden Gate Estates, River Ranch Acres and Remuda Ranch Grants. The complaint alleges that these lots are of little or no use or value to buyers as investments or for any other purpose. The requirement for refunds on the defaulted payments is especially significant, even though the refunds are only partial.

In many such installment-plan purchases of land, the buyer doesn't get a deed until he completes the payments. Thus, under some contracts he can lose all payments even if he misses one or two. In order to make the payments seem easier, salesmen sometimes may push long-term purchase contracts. In the case of GAC, the contracts typically had increased to 12 to 13 years.

You have better protection if you buy through a mortgage so that you get an immediate deed. If the property subsequently is foreclosed you would still have access to whatever equity in the property you have built up, plus other safeguards.

Some of the other allegations in the FTC complaint are revealing of the kind of practices home-site buyers must beware:

—The companies misrepresented that all lots at River Ranch Acres, Remuda Ranch Grants and Golden Gate Estates would be developed so they could be used as homesites.

—The companies often failed to provide promised transportation to the subdivisions until after the six-month cancellation period had expired, and sometimes did not provide transportation at all.

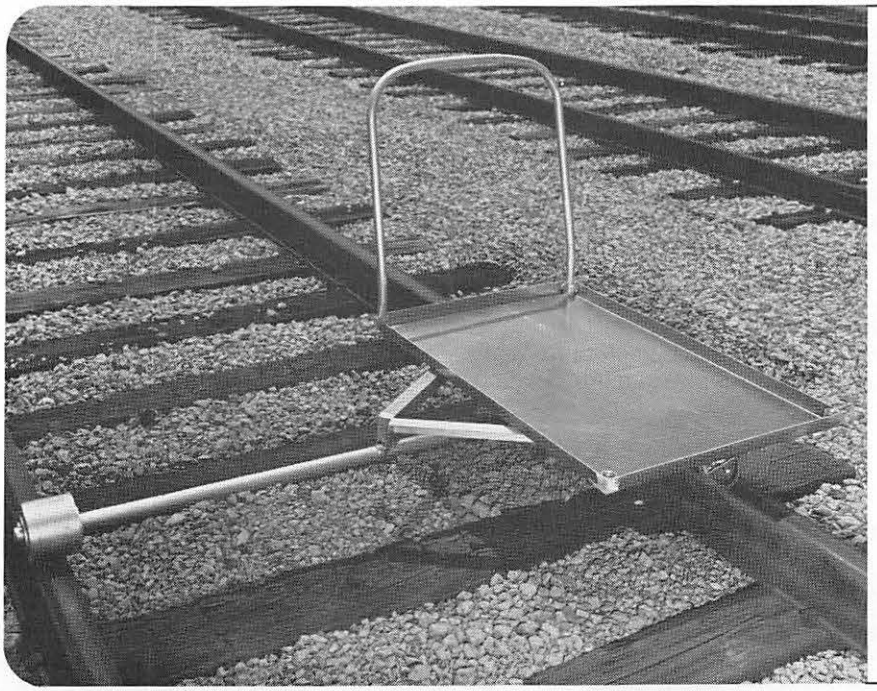
—The companies unfairly solicited signatures on contracts at dinner parties or other sales gatherings *where many buyers were unlikely to read or fully understand the contracts.*

Not only potential buyers, but even people in other states who have already bought land in Florida recently, have been victimized, in this case by "resale services" which give an impression they want to buy the property at more than double the original purchase price. But, the Detroit Better Business Bureau warns, this promotion is a new version of the old "advance fee" scheme. The "resale service" merely lists the property in a brochure with many others for a fee of $100.

In considering the purchase of land as an investment, keep in mind that you also have to take into account interest costs and taxes. While early buyers sometimes have done well, you do have to pay interest meanwhile on your mortgage or purchase contract.

## FEC to add 20 miles of ctc in Florida

Federal Railroad Administration's Railroad Safety Board has approved an installation of traffic control to replace existing automatic block signaling between Monet, and Hypoluxo, FL by the Florida East Coast. FEC also received relief from signal RS&I Section 236.21 to the extent that it can install signals to the left instead of over or to the right of the track governed.

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# News from Canada

## CP Rail has systems operations centre

CP Rail reports a 6% increase over last year in the utilization of its 1,200-diesel fleet. "We're experiencing continuing high traffic volumes and expect to move more traffic this year than ever before," says J. W. Malcolm, CP Rail's chief of transportation.

A new operations nerve centre at the railway's Montreal headquarters has had a lot to do with the sharp increase in equipment utilization. "Up-to-the-minute central planning means each 100 locomotives now do the work of 106," says Malcolm. The system operations centre keeps tab on all train movements and provides information for planning future operations.

"It's the subsequent use of power that really counts—how we can organize tomorrow to benefit from what we're doing today," says J. H. Geddis, CP Rail's assistant chief of transportation.

CP Rail's 16,500-mile network is schematically represented on a 36-ft. wide magnetic board at the operations centre. Routings of approximately 300 trains are planned and monitored on and around the "big board" at any given time. Knowing what trains with how many locomotives will arrive where and when, enables transportation specialists to plan subsequent uses for that equipment. Locomotives spend less time idle; strings of freight cars do not wait so long for the power to move them.

"Motive power is an expensive resource and must be managed with care all the time," says Geddis. Train positions on all main and branch lines are constantly updated through open-line communications with dispatch points across Canada. In turn, dispatchers are in radio contact with locomotives as they move through key sectors of the system.

"But it's what we do with this information that really counts," says Geddis. "We compare the amount of traffic moving at any given time with the expected volumes for the following day. With this kind of information flow and active control over motive power, we're really getting close to optimum utilization from our locomotive fleet."

## Arbitrator clarifies certain statements

Emmett M. Hall, arbitrator in the Canadian railways/non-op union dispute has issued clarifications of certain paragraphs and statements in his Jan. 16, 1974 award (THE SIGNALMAN'S JOURNAL, March 1974 issue, pages 25-27). Abstracts from Hall's clarifications follow:

**Annual vacations.** "The question in issue here is whether the phrase 'years' service,' as used in the Award is governed by and means the same as the phrase 'years of service,' as that phrase is defined in the collective agreement existing between the Railways and the Unions. The contention of the Railways is that the Award did not affect or amend the definition of years of service as used in the collective agreement," Hall said. The company's position is stated as follows:

'However, as a result of the change in the years of service, the number of days required to qualify for additional vacation has to be amended. Formerly, in order to qualify for 3 weeks' vacation, it was necessary to have 8 years' service, which represented 2,000 days, and now, because of the award, it is 6 years' service,—

'And we cannot continue to live with the 2,000 days. It has to be reduced to 1,500 days, and we suggest that this change should be made.'

"It follows from this that the collective agreements stand amend-

Seated at the head table at Local 12's October 20 gala were (left to right) Mr. and Mrs. **Robert R. Mitchell** (he is BofRS grand lodge representative); Mrs. and Mr. **John E. Platt** (he is BofRS vice-president); **J. W. Walsh,** BofRS vice-president; Mr. and Mrs. **Vernon MacGregor** (he is regional signal engineer, Canadian National); and Mrs. and Mr. **G. W. Argle** (he is CP Rail superintendent of signals).

ed only insofar as the Award has so stated.

"My view and I so hold, is that the company's position that 'years' service' means 250 days worked is correct, but I also rule that in computing the 250 days in any one year period days away from work due to illness or injury or on union business for a period not exceeding in all 100 days, shall be included as days worked," Hall said.

**Skill differentials.** "The matter in dispute here is whether the skill differential pay of the Award of January 16, 1974, applies only to skilled mechanics and tradesmen who have attained the top level of rates and should not be applied to employees progressing towards the top level of rates. That is the position of the Railways. The Unions' on the other hand maintain that the differential awarded should be applied to all classifications of skilled mechanics and tradesmen named in the Award, regardless of the progressive rate provision contained in certain collective agreements.

"I cannot accept the Railways contention that an employee is not to be classed as a skilled mechanic or tradesman until he has reached the top rate of the pay schedule. The fact that his basic pay is increased from year to year can not deprive him of his status as a skilled mechanic or tradesman. The increase in pay which is provided in the collective agreements no doubt indicates that he is regarded as more valuable the longer he is with the Railway and his productivity should accordingly be higher. He will, one would expect, be a better mechanic or tradesman as time passes.

"In making the award I had no intention of limiting the skill differential payment only to employees in the 'top rate' of pay class. The position of the Unions on this issue is the correct one and the skill differential payments should be made on this basis," Hall said.

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**ADDRESS CHANGE:** Brotherhood of Railroad Signalmen, Canadian General Committee: 1396 St. Catherine St., West, Suite 323, Montreal, Que. H3G 1P9. Phone: 514-861-9959.

Winnipeg's Centre Local 12's dinner-dance committee included (left to right) Mr. and Mrs. **Michael Mykietowich** (he is chief signalman); Mr. and Mrs. **Arnie Wright**; and Mrs. and Mr. **Harold G. Patson** (he is local chairman).

Others attending the Local 12 festive occasion included (left to right): **G. Hindle,** regional signal supervisor, CN; **L. Hrehirchuk,** signal supervisor, CN; **Vernon MacGregor,** regional signal engineer, CN; **E. Popel,** signal supervisor, CP; **A. Broughton,** signal supervisor, CN; **Harold G. Patson,** local chairman; **H. A. Kerns,** assistant superintendent of signals, CP; **A. E. Brown,** signal supervisor, CN; **G. W. Argle,** superintendent of signals, CP; **G. S. Ross,** signal supervisor, CN; **I. F. Stevenson,** signal supervisor, CN; **D. H. Archer,** regional signal supervisor, CP; **K. H. Hood,** signal supervisor, CP; and **W. Oakley,** signal supervisor, CN.

## CHANGE OF ADDRESS

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# Signalman's Worksheet

## DC Track Circuits (Cont'd)

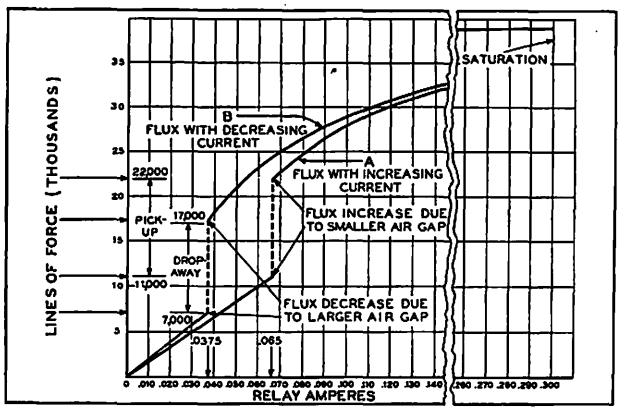


**Fig. 107: Curves showing how flux varies with both current and armature position.**

Note that as we increase the current through the relay to 0.065 ampere, the magnetic lines of force (flux) increase to 11,000. At this point the armature is attracted to the pole pieces (the relay picks up). This reduces the reluctance of the magnetic path by reducing the air gap, and the flux increases to 22,000 lines with no change in current. As we further increase the current to 0.3 ampere, we reach the saturation point, that is, a point where further increase of current will no longer increase the flux significantly. Here the flux has increased to 38,000 lines.

Now, as we reduce the current from saturation to 0.065 ampere, curve B, we note that the flux does not decrease proportionately. We must reduce the current to 0.054 ampere to reach the same 22,000 lines. This difference of current is due to residual magnetism in the cores. To get the relay to drop away, we must further reduce the current, and in turn the flux, to 17,000 lines. This difference of 5000 lines is due to the contact friction and contact spring load curve not agreeing with torque exerted by the magnetism.

It is not our purpose here to go into more details of a relay than are necessary to show the percent release of the relay (ratio of pickup to dropaway, etc.) as these factors affect the track circuit.

We all know that when current increases in a conductor the expanding flux from that conductor in passing through a parallel conductor generates a counter or opposing voltage in that conductor. This generated voltage is proportional to the rate at which the flux passes through the conductor. Now, in a relay winding where all the turns are parallel, the expanding flux of every turn passing through all the other turns generates a counter voltage in each. Therefore, when we apply voltage to a track relay, as when a train moves off a circuit, the current and flux do not increase instantly. They increase at a rate that generates a counter voltage equal to the applied voltage. This slow pickup is desirable. On the other hand, when a train moves on to a circuit and reduces the voltage, tending to reduce the current and flux, the flux from each turn recedes back through all the other turns at a rate that will just generate a counter voltage that tends to maintain the current and, in turn, the flux. Therefore, the relay is slow in dropping away—which is not desirable.

If the relay current is just at pickup (ballast resistance at its minimum), the relay shunt is quite fast, for the flux need only recede from 22,000 lines to 17,000 lines. If the relay current were at saturation, with 38,000 lines, it would take considerably more time to drop to 17,000 lines.

This condition is undesirable for a short train moving from one track circuit to another. The track relay of the first circuit could pick up before the other dropped away, thus releasing route locking, for example, in an interlocking.

To avoid this condition, we put resistance in series with the relay. If we put 4 ohms in series with a 4-ohm relay, the flux will drop twice as fast because it must drop fast enough to maintain the current through 8 ohms in place of 4 ohms; and if we inserted 12 ohms it would drop 4 times as fast. Furthermore, adding this series resistance affects the circuit so that the relay current does not rise as high at dry ballast and therefore drops more quickly to the release point of the relay. However, if we refer to Figure 105, we note that when we add relay series resistance, we change the shape of the curve as from A to B and find that the ohmic shunt is poorer.

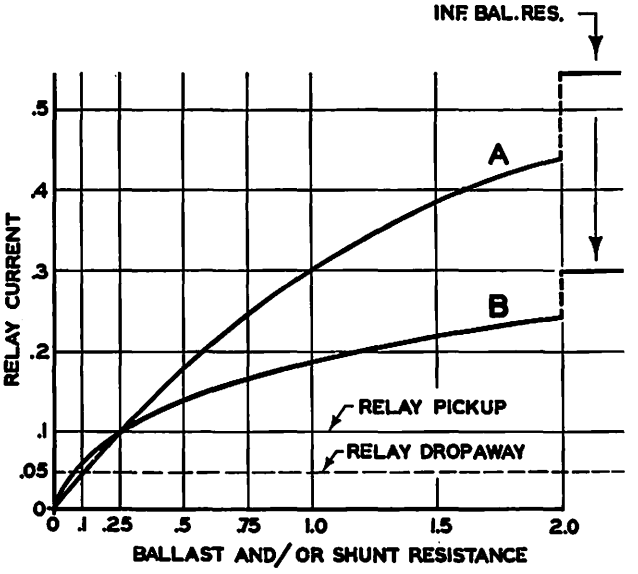


**Fig. 105: Relay current variation with varying resistance across the rails.**

*NOTE: Information and drawings furnished by General Railway & Signal Co.*

# GRS
# Distributed Computer System Controls New $15 Million Yard

The Southern Railway's new $15 million, 32-track yard at Sheffield, Alabama, expedites traffic in the Memphis-Chattanooga-Birmingham triangle. Computer planned east and west train routings from Sheffield Yard help to speed Southern freight through large metropolitan areas.

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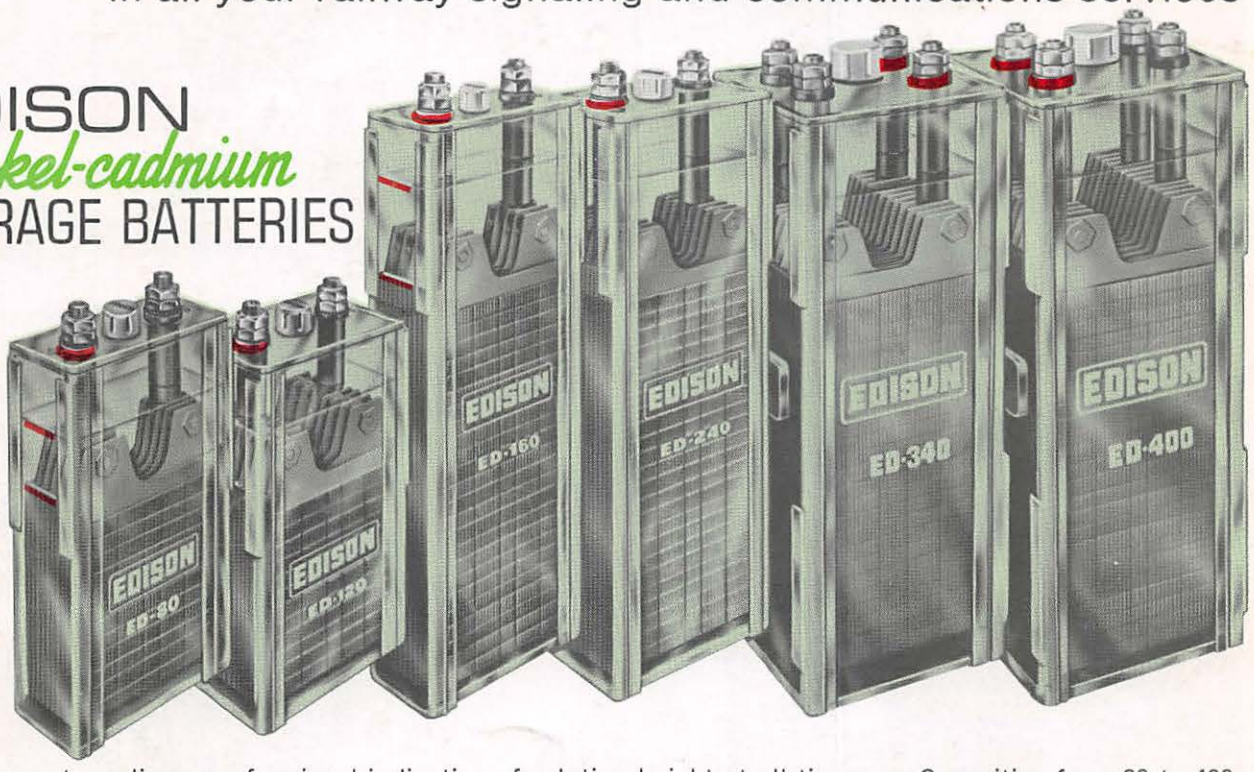


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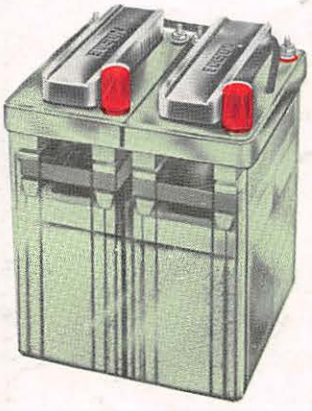

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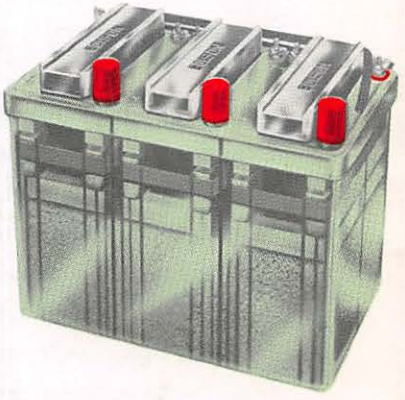

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